FILE 'POTFULL' ENTERED AT 14:08:41 ON 24 JUN 2002 COPYRIGHT (C) 2002 Univentio

- s ll and protecting L. 5 FILE USPATFULL 0 FILE MEDLINE L :L42 FILE IFIPAT 0 FILE USPAT2 L 1 FILE CAPLUS
1 FILE WPIDS
0 FILE EUROPATFULL L 1.7 1 FILE PATOSWO Γ L10 1 FILE PCTFULL TOTAL FOR ALL FILES Lil 11 LI AND PROTECTING = dup rem 111 PROCESSING COMPLETED FOR L11 7 DUP REM L11 (4 DUPLICATES REMOVED) = d ll2 1-7 ibib abs LIZ ANSWER 1 OF 7 USPATFULL DUPLICATE 1 ACCESSION NUMBER: 2002:126323 USPATFULL TITLE: Purification of human troponin INVENTOR(S): Conn, Gregory, Cary, NC, UNITED STATES Feardon, Brian, Seattle, WA, UNITED STATES Zeng, Mianfang, Northborough, MA, UNITED STATES Thang, Chenming, Blacksburg, VA, UNITED STATES PATENT ASSIGNEE(S): Diosynth RTP, Inc. (U.S. corporation) NUMBEE KIND DATE US 2002064835 AI 20020530 US 2001-903398 AI 20010710 (9) PATENT INFORMATION: APPLICATION INFO.: NUMBER DATE PRIORITY INFORMATION: US 2000-217069F 20000710 (60) DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: DAFBY A DAFBY P.C., 805 Third Avenue, New York, NY, 10002
NUMBER OF CLAIMS: 20 NUMBER OF CLAIMS: 20
EXEMPLARY CLAIM: 1
NUMBER OF DEAWINGS: 11 Drawing Page(s)
LINE COUNT: 566 CAS INDEXING IS AVAILABLE FOR THIS PATENT. The invention is directed to methods for purifying Troponin I, particularly recombinant Tropnin I produced in a bacterial expression system. Recombinant Trophin I can be advantageously purified after reversibly protecting the free sulfhydryl groups, e.g., by forming sulfates. In a specific example, Tropnin I reacted with sodium tetrafhionate yielded sulfitolyzed Tropnin I, which was purified by chromatography on an anion exchanger, followed by hydrophobic interaction chromatography. Facile deprotection of the sulfhydryl groups yields a highly purified product ready for refolding.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 2 OF 7 USPATFULL

ACCESSION NUMBER: 2002:105940 USPATFULL

DUPLICATE 2

Purification of human troponin TITLE:

INVENTOR(S): Conn, Gregory, Cary, NC, UNITED STATES

Reardon, Brian, Seattle, WA, UNITED STATES

Beng, Kianfang, Northborough, MA, UNITED STATES Chang, Chenming, Blacksburg, VA, UNITED STATES

Diosynth RTP, Inc. (U.S. corporation) PATENT ASSIGNEE(S):

> NUMBER KIND DATE

PATENT INFORMATION: APPLICATION INFO.:

US 2002055145 A1 20020509 US 3001-998619 A1 20011130 (9)

RELATED APPLN. INFO.: Continuation of Ser. No. US 2001-903398, filed on 10

Jul 2001, PENDING

NUMBER DATE ______

PRIORITY INFORMATION: US 2000-217069P 20000710 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: DARBY & DAPBY P.C., 805 Third Avenue, New York, NY,

20

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

1.

NUMBER OF DRAWINGS: 11 Drawing Page(s)

LINE COUNT: 570

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The invention is directed to methods for purifying Troponin

I, particularly recemberant Tropnin I produced in a bacterial empression system. Fecombinant Tropnin I can be advantageously purified after reversibly protecting the free sulfhydryl

groups, e.g., by forming sulfates. In a specific example, Tropnin I reacted with sodium tetrathionate yielded sulfitolyzed Tropnin I, which was purified by chromatography on an anion exchanger, followed by hydrophobic interaction chromatography. Facile deprotection of the sulfhydryl groups yields a highly purified product ready for refolding.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWEP 3 OF 7 CAPLUS COFFEIGHT 2000 ACS DUPLICATE 3

ACCESSION NUMBER: 2007:51523 CAPLUS

DOCUMENT NUMBER:

136:101.58

TITLE:

Chromatographic purification of human

sulfhydryl-protected recombinant

troponin I

INVENTOR(S):

Conn, Gregory; Reardon, Brian; Zeng, Xiangang; Zhang,

Chemming

PATENT ASSIGNEE(S):

Diosynth FTP, Inc., USA

SCURCE:

PUT Int. Appl., 08 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

Enalish

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
Wo 1002004512	A2	10000117	WO 20(1 US21817	20010710
Web 200200451/	A3	20020516		

W: AE, AG, AL, AM, AT, AU, AZ, MA, BB, BB, BB, BY, BZ, CA, CH, CN,

CO, CF, CU, CZ, DE, DK, DM, EC, EE, ES, FI, GB, GD, GE, HE, HU,

ID, IL, IN, IA, JP, KE, KG, FF, FR, KC, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MC, NC, PL, PT, RO, RU, SD,

SE, SG, SI, SF, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU,

SA, SW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, M3, SD, SL, SS, TS, UG, ZW, AT, BE, CH, CY,

DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,

BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 2002064835 A1 20020509 US 2001-903398 20010710 US 2002055145 A1 20020509 US 2001-908619 20011130 US 2000-717069P P 20000710

US 2000-217069P P 20000710 PRIORITY APPLN. INFO.: US 2001-903398 A1 20010710

The invention is directed to methods for purifying troponin ΑB

I, particularly recombinant troponin I

produced in a bacterial expression system. Recombinant troponin

I can be advantageously purified after reversibly

protecting the free sulfhydryl groups, e.g. by forming sulfates. In a specific example, troponin I reacted

with sodium tetrathionate yielded sulfitoly.ed troponin

I, which was purified by chromatog, on an anion exchanger,

followed by hydrophobic interaction chromatog. Facile deprotection of the sulfhydryl groups yields a highly purified product ready for

refolding.

L12 ANSWER 4 OF 7 USPATFULL

ACCESSION NUMBER: 2002:85170 USPATFULL

TITLE: Neuropeptide-like polypeptide zpep17

INVENTOE(S):Sheppard, Paull O., Granite Falls, WA, UNITED STATES

Bishop, Paul D., Fall City, WA, UNITED STATES

NUMBEE KIND DATE PATENT INFORMATION: US 2002045210 A1 20020418 APPLICATION INFO.: US 2001-776795 A1 20010205 (9)

> NUMBER DATE

LEGAL REPRESENTATIVE: Jennifer R. Johnson, ZymoGenetics, Inc, 1201 Eastlake

Avenue East, Seattle, WA, 98103

NUMBER OF CLAIMS: , in EXEMPLAFY CLAIM: l

NUMBER OF DEAWINGS: 12 Drawing Page(s)
LINE COUNT: 4459

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention relates to polynuclectude and polypeptide molecules for zpep17, a novel secreted protein. The polynucleotides encoding zpep17, may, for example, be used to identify a region of the genome associated with human disease states. The present invention also includes methods for producing the protein, uses therefor and antibodies thereto.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 5 OF 7 USPATEULL

ACCESSION NUMBER: 7007:48270 UPPATFULL

TITLE: Methods for analyzing protein binding events

INVENTOF (3): Hefti, John J., San Francisco, CA, UNITED STATES

NUMBER KIND DATE

PATENT INFORMATION: UP 2002028461 A. 20020707 APPLICATION INFO.: UP 2001-9.3474 Al 20040806 (9)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1999-365 80, filed on 2 Aug .999, GEANTED, Pat. No. US #287374 Continuation-in-part

of Ser. No. US 1999-243194, filed on 1 Feb 1999,

NUMBER DATE

PEIORITY INFORMATION: US 1998-73445P 19980202 (60) US 1999-134740P 19990518 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: Richard L. Neeley, Clifford B. Perry, Signature

BioScience, Inc., 21124 Cabot Boulevard, Hayward, CA,

94545-1130

NUMBER OF CLAIMS: 45 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 37 Drawing Page(s)

LINE COUNT: 4041

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention provides a variety of methods of analyzing protein binding events using a system dapable of directly detecting protein/ligand complexes based upon the dielectric properties of the complex. The system can be used in a variety of analyses involving protein binding events, such as screening ligand libraries, characterizing protein binding interactions, and identifying ligands. The system can also be utilized in diverse analytical and diagnostic applications.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 6 OF 7 FCTFULL COPYRIGHT 2002 Univention

ACCESSION NUMBER: 2002036624 PCTFULL ED 20020523 EW 200219

TITLE (ENGLISH): METHODS AND COMPOSITIONS RELATING TO FORTILIN, AN ANTI-APOPTOTIC MOLECULE, AND MODULATORS OF FORTILIN

TITLE (FRENCH): PROCEDES ET COMPOSITIONS ASSOCIES A LA FORTILINE, UNE

MOLECULE ANTI-APOFTOTIQUE, ET MODULATEURS DE FORTILINE

INVENTOR(S): FUJISE, Kenichi; YEH, Edward

PATENT ASSIGNEE(S): BOARD OF REGENTS, THE UNIVERSITY OF TEXAS SYSTEM, for

all designates States except US; FUJISE, Kenichi, for

US only; YEH, Edward, for US only

AGENT: SHISHIMA, Gina, N.

LANGUAGE OF PUBL.: English
LANGUAGE OF FILING: English
DOCUMENT TYPE: Fatent

PATENT INFORMATION:

DESIGNATED STATES: AE AG AL AM AT AU AZ BA BB BG BR BY BC CA CH CN CO CR

CU CU CU DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID ID IN IS JP KE KG KF KR KZ LC LK LF LS LT LU LV MA MD MG MK MN MW MX MZ NO NC PH PL PT RO RU SD SE SG SI SK DL TU TM TR TT TC UA UG US UZ VN YU ZA ZW GH GM KE LS

MW MC SD SL SC TZ UG CW AM AC BY KG KC MD EU TJ TM AT BE CH CY DE DK ES FI EE GB GE IE IT LU MC NL PT SE TE

BE BU OF OG OF OM GA GN GQ GW ML ME NE SN TD TG

APPLICATION INFO.: W0 .001-U34.2985 A .00011030

PRIORITY INFO:: 03 2000-60/244,416 20001030

The polypeptide Fortulin (also known as Translationally Controlled Tumour Protein, ToTP) specifically interacts with p53, a tumor Suppressor involved in the induction of apoptosis and the normal growth regulation of a cell. Fortilin also specifically binds MCLI (Myelsia cell Leukemia 1). Fortilin has the ability to prevent apoptosis, which may be unregulated in hyperproliferative cells. The present invention is directed at compositions and methods involving a Fortilin modulator, which can induce apoptosis, for the prevention, treatment, or diagnosis of hyperproliferative diseases and conditions, including cancer and

atherosclerisis. It is directed also at compositions and methods

involving Fortilin, which can inhibit apoptosis, for the treatment of diseases and condition characterized by apoptosis, including certain vascular conditions.

ABFR Le polypeptide fortiline (egalement appele proteine tumorale de regulation de traduction, TCTP) interagit specifiquement avec p53, un suppresseur de tumeur intervenant dans l'induction de l'apoptose et la regulation de la croissance normale d'une cellule. La fortiline se lie aussi specifiquement a MCL1 (leucemie myeloide 1). La fortiline est capable de prevenir l'apoptose, qui peut etre dereglee dans des cellules hyperproliferatives. L'invention concerne des compositions et des procedes comprenant un modulateur de fortiline, capable d'induire l'apoptose, pour prevenir, traiter ou diagnostiquer des maladies ou des affections hyperproliferatives, y compris le cancer et l'atherosclerose; ainsi que des compositions et des procedes comprenant la fortiline, capable d'inhiber l'apoptose, pour traiter des maladies et affections caracterisees par l'apoptose, y compris certaines affections vasculaires.

L12 ANSWER 7 OF 7 USPATFULL

ACCESSION NUMBER: 2001:152781 USPATFULL

TITLE: Methods for analyzing protein binding events
INVENTOR(S): Hefti, John, San Francisco, CA, United States

PATENT ASSIGNEE(S): Signature BioScience, Inc., Hayward, CA, United States

(U.S. corporation)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1999-243194, filed

on 1 Feb 1999

NUMBER DATE

FRIORITY INFORMATION: US 1998-73445P 19980202 (60) US 1999-134740P 19990518 (60)

DOCUMENT TYPE: Utility FILE SEGMENT: GRANTED

FRIMAPY EXAMINER: Horlick, Kenneth P. ASSISTANT EXAMINER: Strzelecka, Teresa

LEGAL REFRESENTATIVE: Ausenhus, Scott L., Perry, Clifford B., Neeley, Richard

L. 45

NUMBER OF CLAIMS: 45
EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 44 Drawing Figure(s); 33 Drawing Page(s)

LINE COUNT: 4099

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention provides a variety of methods of analyzing protein bunding events using a system capable of directly detecting protein/ligand complexes based upon the dielectric properties of the complex. The system can be used in a variety of analyses involving protein binding events, such as screening ligand libraries, characterizing protein binding interactions, and identifying ligands. The system can also be utilized in diverse analytical and diagnostic applications.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

s tropenin and purification
L13 270 FILE USPATFULL
L14 479 FILE MEDLINE
L15 5 FILE IFIPAT
L16 5 FILE USPAT2
L17 204 FILE CAPLUS

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Ll8
L19
           45 FILE EUROPATFULL
L20
            4 FILE PATOSWO
L21
           19 FILE PCTFULL
TOTAL FOR ALL FILES
         1042 TROPONIN AND PURIFICATION
= s l.i. and (sulfhydryl (w) group)
LD3 35 FILE USPATFULL
            3 FILE MEDLINE
L. 1
L_{-}^{\pm t}
           2 FILE IFIPAT
           3 FILE USPAT2
Lab
           l FILE CAPLUS
L2:7
\Gamma \% R
           1 FILE WPIDS
L. ^{-4}
           1 FILE EURCPATFULL
L30
            ! FILE PATOSWO
L31
            : FILE PCTFULL
TOTAL FOR ALL FILES
T. 3.7
           47 L22 AND (SULFHYDFYL (W) GROUP)
= dup rem 132
PROCESSING COMPLETED FOR 1.32
            41 DUP REM L33 (6 DUPLICATES REMOVED)
L33
= \cdot d 133 1-41 ibib abs
L33 ANSWER 1 OF 41 USPATFULL
                                                       DUPLICATE 1
                        2002:126323 USPATFULL
ACCESSION NUMBER:
TITLE:
                        Purification of human troponin I
                        Conn, Gregory, Cary, NC, UNITED STATES
Reardon, Brian, Seattle, WA, UNITED STATES
INVENTOR(S):
                        Zeng, Mianfang, Northborough, MA, UNITED STATES
                        Thang, Chenming, Blacksburg, VA, UNITED STATES
                        Diosynth ETP, Inc. (U.S. corporation)
PATENT ASSIGNEE(S):
                            NUMBER KIND DATE
                           -- .-.----
                       US 2002064835 Al 20020530
US 2001-903398 Al 20010710
PATENT INFORMATION:
AFFLICATION INFO.:
                                         Al 20010710 (9)
                             NUMBER
                                          DATE
                        PRIORITY INFORMATION: US 2000-217069P 20000710 (60)
DOCUMENT TYPE:
                      Utility
FILE SEGMENT:
                      APPLICATION
LEGAL REPRESENTATIVE: DARBY & DARBY P.C., 805 Third Avenue, New York, NY,
                      -100.72
                       20
NUMBER OF CLAIMS:
EMEMPLARY CLAIM:
                       1
NUMBER OF DEAWINGS:
                       II Drawing Page(s)
LINE COUNT:
                       State
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
      The invention is directed to methods for purifying Troponin I,
       particularly recombinant Tropnin I produced in a bacterial expression
       system. Recombinant Tropnin I can be advantageously purified after
       reversibly protecting the free sulfhydryl groups,
       e.g., by forming sulfates. In a specific example, Tropnin I reacted with
       sodium tetrafhi:nate yielded Sulfitelyzed Tropnin I, which was purified
       by shremategraphy on an anion exchanger, followed by hydrophobic
       interaction chromatography. Facile deprotection of the
       sulfhydryl groups yields a highly purified product
       ready for refolding.
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11 FILE WPIDS

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L33 ANSWER 2 OF 41 USPATFULL DUPLICATE 2

ACCESSION NUMBER: 2002:105940 USPATFULL

Purification of human troponin I TITLE:

Conn, Gregory, Cary, NC, UNITED STATES INVENTOR (S:: Reardon, Brian, Seattle, WA, UNITED STATES

Beng, Xianfang, Northborough, MA, UNITED STATES Thang, Chemming, Blacksburg, VA, UNITED STATES

Diosynth RTP, Inc. (U.S. corporation) PATENT ASSIGNEE(S):

NUMBER KIND DATE

US 2002055145 A1 20020509 US 2001-998619 A1 20011130 (9) PATENT INFORMATION: APPLICATION INFO .:

RELATED APPLN. INFO.: Continuation of Ser. No. US 2001-903398, filed on 10

Jul 2001, PENDING

NUMBER DATE

PRIORITY INFORMATION: US 2000-217069P 20000710 (60)

DOCUMENT TYPE: FILE SEGMENT: Utility APPLICATION

LEGAL REPRESENTATIVE: L'ARBY & DAFBY P.C., 805 Third Avenue, New York, NY,

10022

20 1

NUMBER OF CLAIMS: 20 EMEMPLARY CLAIM: 1 NUMBER OF DRAWINGS: 11 Drawing Page(s) LINE COUNT: 570

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The invention is directed to methods for purifying Troponin I,

particularly recombinant Tropnin I produced in a bacterial expression system. Recombinant Tropnin I can be udvantageously purified after

reversibly protecting the free sulfhydryl groups,

e.g., by forming sulfates. In a specific example, Tropnin I reacted with sodium tetrafhionate yielded sulfitelyzed Tropnin I, which was purified

by chromatography on an anion exchanger, followed by hydrophobic interaction chromatography. Facile deprotection of the

sulfhydryl groups yields a highly purified product

ready for refolding.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L33 ANSWEL 3 OF 41 USPATEWILL DUPLICATE 3

ACCESSION NUMBER: 700%:16843 USPATFULL

FESCHART BIO-ASSAY DEVICE AND TEST SYSTEM FOR DETECTING TITLE:

MOLECULAR BINDING EVENTS

HEFTI, JOHN, SAN FFANCISCO, CA, UNITED STATES INVENTOP(S):

NUMBER KIND DATE ______ US 7002009723 A1 .0020124 US 6376259 B2 700204.3 US 7000-480846 A1 70000110 PATENT INFORMATION:

(9) APPLICATION INFO .:

RELATED APPLN. INFO.: Continuation of Ser. No. US 1949-365578, filed on 2 Aug

1999, PENDING Continuation in part of Ser. No. US

1999-243196, filed on 1 Feb 1999, PENDING

Continuation in part of Ser. No. US 1999-243194, filed

on 1 Feb 1399, PENDING

NUMBEL DATE

PRIORITY INFORMATION: US 1998-73445P 19980202 (60) DCCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

LEGAL MEPRESENTATIVE: SIGNATURE BIOSCIENCE, INC., 21124 CABOT BLVD., HAYWARD,

CA, 94545-1130

NUMBER OF CLAIMS: EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 38 Drawing Page(s) LINE COUNT: 3548

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Systems and methods are presented for detecting molecular binding events and other environmental effects using the unique dielectric properties of the bound molecular structure or structures. A molecular binding region is coupled along the surface of a signal path. A test signal is propagated along the signal path, whereby the test signal couples to the molecular binding region, and in response, exhibits a signal response.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L33 ANSWER 4 OF 41 USPATFULL DUPLICATE 4

ACCESSION NUMBEF: 2002:122429 USPATFULL

"ITLE: Computer program and database structure for detecting

molecular binding events

INVENTOF(S): Hefti, John, San Francisco, CA, United States

PATENT ASSIGNEE(S): Signature BioScience, Inc., Hayward, CA, United States

(U.S. corporation)

NUMBER KIND DATE » .-----PATENT INFORMATION: US 6395480 B1 20020528
US 2002072857 A1 20020613

APPLICATION INFO.: US 1999-243196 19990201 (9)
DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Brusca, John S.
ASSISTANT EXAMINER: Kim, Young
LEGAL REPRESENTATIVE: Party Clafford B LEGAL FEFRESENTATIVE: Perry, Clifford B.

NUMBER OF CLAIMS: 21 EXEMPLAFT CLAIM:

NUMBER OF DRAWINGS: 51 Drawing Figure(s); 28 Drawing Page(s)

3363 LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Systems and methods for detecting molecular binding events and other environmental effects using the unique dielectric properties of the bound molecular structure or structures are presented. A molecular binding layer is courled along the surface of a signal path. A test signal is propagated along the signal path, whereby the test signal rouples to the molecular binding layer, and in response, exhibits a signal response.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L/3 ANSWER 5 OF 41 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 5

ACCESSION NUMBER: 2002:51503 CAPLUS

136:101258 DOCUMENT NUMBER:

Chromatographic purification of human TITLE:

sulfhydryl-protected recombinant troponin I

Conn, Gregory; Reardon, Brian; Zeng, Xiangang; Zhang, INVENTOR (S):

Chenming

PATENT ASSIGNEE(S): Diosynth ETF, Inc., USA SCURCE: PCT Int. Appl., 28 pp.

GCDEN: PIXXD2

DOCUMENT TYPE: Patent English LANGUAGE:

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

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    Wo 2002004512
    A2 20020117

    Wo 2002004512
    A3 20020516

                                            WD .001-US21817 20010710
          W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
              CO, CR, CU, CE, DE, DK, DM, EC, EE, ES, FI, GB, GD, GE, HR, HU,
              ID, IL, IN, IS, JP, KE, KG, KP, KR, KS, LC, LK, LR, LS, LT, LU,
              LV, MA, MD, MG, MK, MM, MW, MX, ME, NO, MZ, PL, PT, RO, EU, SD,
              SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU,
              MA, NW, AM, AC, BY, KG, KC, MD, RU, TJ, TM
          RW: GH, GM, KE, LS, MW, MS, SD, SL, SE, TS, UG, SW, AT, BE, CH, CY,
              DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     US 2002054835 A1 .000.0530 US .001-903398 20010710 US 2002055145 A1 .000.0509 US .001 998619 .00011130
PRIORITY APPLN. INFO.:
                                          US ::000-217069P P :::0000710
                                          US .001-903398 Al 20010710
AΒ
     The invention is directed to methods for purifying troponin I,
     particularly recombinant troponin I produced in a bacterial
     expression system. Recombinant troponin I can be advantageously
     purified after reversibly protecting the free sulfhydryl
     groups, e.g. by forming sulfates. In a specific example,
     troponin I reacted with sodium tetrathionate yielded sulfitolyzed
     troponin I, which was purified by chromatog. on an anion
     exchanger, followed by hydrophobic interaction chromatog. Facile
     deprotection of the sulfhydryl groups yields a highly
     purified product ready for refolding.
L33 ANSWER 6 OF 41 USPATFULL
                         .3002:149299 USPATFULL
ACCESSION NUMBER:
                         Death domain-containing receptor polynucleotides,
TITLE:
                         polypeptides, and antibodies
INVENTOR(S):
                         Ni, Jian, Germantown, MD, UNITED STATES
                         Fuben, Steven M., Olney, MD, UNITED STATES
                         NUMBER KIND DATE
PATENT INFORMATION: US 2002077458 A1 20020620 APPLICATION INFO:: US 2001-835788 A1 20010417 (9)
RELATED APPLN. INFO.: Continuation-in-part of Ser. No. WO 2000-US38666, filed
                         on 17 Oct 2000, UNKNOWN
                               NUMBER DATE
                         tis 1999-167246P 19991124 (60)
                       Utility
APPLICATION
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PRIORITY INFORMATION: US (999-159585P 169941018 (60)
US 1999-167246P 19991124 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: HUMAN GENOME SCIENCED INC, 9410 KEY WEST AVENUE, BCCKVILLE, MD, 20850

NUMBER OF CLAIMS: 12
EXEMPLAPY CLAIM: 1
LINE COUNT: 14143

AB The present invention relates to novel human DDCR polypeptides an

The present invention relates to novel human DDCR polypeptides and isolated nucleic acids containing the coding regions of the genes encoding such polypeptides. Also provided are vectors, host cells, antikodies, and recombinant methods for producing human DDCR polypertides. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating disorders related to these novel human DDCR polypeptides.

L33 ANSWER 7 OF 41 USPATFULL

ACCESSION NUMBER: .000:14913. USPATFULL
TITLE: .8 human secreted proteins
INVENTOR(S): Buben, Steven M., Olney, MD, UNITED STATES

Rosen, Craig A., Laytonsville, MD, UNITED STATES Li, Yi, Sunnyvale, CA, UNITED STATES Zeng, Zhizhen, Lansdale, PA, UNITED STATES Kyaw, Hla, Frederick, MD, UNITED STATES Fischer, Carrie L., Burke, VA, UNITED STATES Li, Haodong, Gaithersburg, MD, UNITED STATES Soppet, Daniel R., Centreville, VA, UNITED STATES Gentz, Reiner L., Rockville, MD, UNITED STATES Wei, Ying-Fei, Berkeley, CA, UNITED STATES Moore, Paul A., Germantown, MD, UNITED STATES Young, Paul E., Gaithersburg, MD, UNITED STATES Greene, John M., Gaithersburg, MD, UNITED STATES Ferrie, Ann M., Tewksbury, MA, UNITED STATES

NUMBER	KIND	DATE
2002077287	A1	00.3063.0

PATENT INFORMATION: APPLICATION INFO.:

U.5433 2001-852659 Al 20010511 (9)

RELATED APPLN. INFO.:

Continuation in-part of Ser. No. US 1998-152060, filed

on 11 Sep 1998, UNKNOWN

DOCUMENT TYPE: FILE SEGMENT:

Utility APPLICATION

LEGAL REPRESENTATIVE:

HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE,

ROCKVILLE, MD, 20850

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

2.3 1

LINE COUNT:

17779

AB

The present invention relates to novel human secreted proteins and isolated nucleic acids containing the coding regions of the genes encoding such proteins. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human secreted proteins. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating diseases, disorders, and/or conditions related to these novel human secreted proteins.

L33 ANSWER 8 OF 41 USPATFULL

ACCESSION NUMBER:

..001:149114 USPATFULL

TITLE:

Nucleic acids, proteins, and antibodies

INVENTOR(S):

Fosen, Craig A., Laytonsville, MD, UNITED STATES Puben, Steven M., Olney, MD, UNITED STATES

Barash, Steven C., Rockville, MD, UNITED STATES

	MĤ	MBER	KIND	DATE
PATENT INFORMATION:	US 2002	077.70	A1	20020620
APPLICATION INFO.:	US 2001	-764848	A1	.:0010117
		NUMBER	DA	ATE:
RIORITY INFORMATION:	 0000, 200	- -179065P	.:(10.0	0131 (±0)
	H3 (200)0	-180m, BP	.1000	0.304 (60)
	us 2000	-014886P	.1000	Фь28 (AO)
	us 2000	-317487F	.1000	0711 (60)
	US 2000	-1055758P	.000	0814 (n0)
	113 - (0)0	-3000963P	2000	0726 (+0)
	U3 , 000	1749bP	.:000	0711 (60)
	U3 .0000	-1.1447P	.:000	©814 (±0)
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	H;; , 00u	-/11+647P	.1000	0707 (+ 0)
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	U3 = 000	I+880P	.:000	0707 (+11)
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US 2000-251869P .:0001238 (60) US 2000-235834P 20000927 (60) US .:000-:34274P 20000931 (60) US 2000-234.23P 20000921 (60) 20000830 (60) US 2000-118924P .00000814 (60) US 3000-2245EMP 20000929 (60) US 2000-236369P US 2000-224519P US 2000-220964P US 2000-241809P 20001020 (60) US [000-349299P 20001117 (60) US 2000-236327P 20000939 (60) US 2000-241785P 20001020 (60) 20001101 (60) US 2000-..44o17P 20000814 (60) US 2000-135268P US 2000-236368P 20000929 (60) US 2000-251856P 20001208 (60) US 2000-251868P 20001208 (60) US 2000-229344P 20000901 (60) US 2000-234997P 20000925 (60) US 2000-229343P 20000901 (60) US 0000-009345P 20000901 (60) 20000901 (60) US 3000-239287P 20000905 (ნ0) US .0000-229513P US 2000-231413P 20000908 (60) US 2000-229509P 20000905 (60) US 3000-236367P 20000929 (60) US 2000-237039P 20001002 (60) US 2000-237038P 20001002 (60) US 2000-236370P 30000939 (60) US 2000-236802P -20001002 (60) US 2000-237037P 20001002 (60) US 2000-237040P 20001002 (ნმ) US 2000-240960P 20001020 (60) US [10]00=[39935P - 20001013 (60)

DOCUMENT TYPE: FILE SEGMENT:

Utility APPLICATION

LEGAL REPRESENTATIVE:

HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE,

ROCKVILLE, MD, 20850

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

. 4 l

LINE COUNT:

20057

The present invention relates to novel proteins. More specifically, AΒ isolated nucleic acid molecules are provided encoding novel polypeptides. Novel polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human polynucleotides and/or polypeptides, and untikedies. The invention further relates to diagnostic and therapeutic methods useful for diagnosing, treating, preventing and/or prognosing disorders related to these novel polypeptides. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The present invention further relates to methods and/or compositions for inhabiting or enhancing the production and function of the polypeptides of the present invention.

L33 ANSWEE 9 OF 41 USPATFULL

ACCESSION NUMBER:

.:000:143614 USPATEULL

TITLE:

.78 human secreted proteins

INVENTOR(3):

Fuben, Steven M., Olney, MD, UNITED STATES

Fosen, Craig A., Laytonsville, MD, UNITED STATES

Li, Yi, Sunnyvale, CA, UNITED STATES

Deng, Dhilhen, Lansdale, PA, UNITED STATES Kyaw, Hla, Frederick, MD, UNITED STATES

Fischer, Carrie L., Burke, VA, UNITED STATES Li, Haodong, Gaithersburg, MD, UNITED STATES Soppet, Daniel R., Centreville, VA, UNITED STATES Gentz, Reiner L., Rockville, MD, UNITED STATES Wei, Ying-Fei, Berkeley, CA, UNITED STATES Moore, Paul A., Germantown, MD, UNITED STATES Young, Paul E., Gaithersburg, MD, UNITED STATES Greene, John M., Gaitherspurg, MD, UNITED STATES Ferrie, Ann M., Painted Post, NY, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2002076756	Al	20020620	
APPLICATION INFO .:	из дооц-853161	Αì	20010511	(9)

NUMBER DATE ------PRIORITY INFORMATION: US 2001-265583P 20010202 (60)

DOCUMENT TYPE: Utility
File SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE,

ROCKVILLE, MD, 20850 NUMBER OF CLAIMS: EMEMPLARY CLAIM: LINE COUNT: 1 17788

The present invention relates to novel human secreted proteins and isolated nucleic acids containing the coding regions of the genes encoding such proteins. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human secreted proteins. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating diseases, disorders, and/or conditions related to these novel human secreted proteins.

L33 ANSWER 10 OF 41 USPATFULL

ACCESSION NUMBER: 2001:141609 USPATFULL

TITLE: Transferrin polynucleotides, polypeptides, and

antibodies

Ruben, Steven M., Olney, MD, UNITED STATES INVENTUF(S):

Shi, Yanggu, Garthersburg, MD, UNITED STATES

NUMBER KIND DATE PATENT INFOFMATION: APPLICATION INFO.:

RELATED APPLN. INFO.: Continuation in part of Ser. No. WD 2000-US34769, filed

on 31 Dec 2000, UNKNOWN

NUMBER DATE PRIORITY INFORMATION: US 1999-171595P 199912.3 (60)

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE,

FOCKVILLE, MD, 20850

NUMBER OF CLAIMS: EXEMPLARY CLAIM: LINE COUNT: -1.8048

The present invention relates to novel human transferrin polypeptides and isplated nucleic acids containing the coding regions of the genes encoding such polypertides. Also provided are vectors, host cells, artihodies, and recombinant methods for producing human transferrin polypeptides. The inventibn further relates to diagnostic and therapeutic methods useful for diagnosing and treating disorders related to these novel human transferrin polypeptides.

L33 ANSWER 11 OF 41 USPATFULL

ACCESSION NUMBER: 1002:133469 USPATFULL

TITLE: Gerine protease polynucleotides, polypeptides, and

antibodies

INVENTOR(S): Shi, Yanggu, Gaithersburg, MD, UNITED STATES

Ruben, Steven M., Olney, MD, UNITED STATES Ni, Jian, Germantown, MD, UNITED STATES

NUMBER DATE

PRIORITY INFORMATION: US 2000-189025P 20000314 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE,

ROCKVILLE, MD, 20850

NUMBER OF CLAIMS: 22 EXEMPLARY CLAIM: 1 LINE COUNT: 13119

The present invention relates to novel human serine protease polypeptides and isolated nucleic acids containing the coding regions of the genes encoding such polypeptides. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human serine protease polypeptides. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating disorders related to these novel human serine protease polypeptides.

133 ANSWER 12 OF 41 USPATFULL

ACCESSION NUMBER: 1000:1.16703 USPATFULL

TiTLE: Immunoglobulin superfamily polynucleotides,

polypeptides, and antibodies

INVENTOF(S): Young, Paul E., Gaithersburg, MD, UNITED STATES

Ni, Jain, Fockville, MD, UNITED STATES Fuben, Steven M., Olney, MD, UNITED STATES Shi, Yangqu, Gaithersburg, MD, UNITED STATES

RELATED APPIN. INFO.: Continuation-in-part of Mer. No. WO 2000-US23662, filed

on 29 Aug 2000, UNKNOWN

NUMBER DATE

PRIORITY INFORMATION: US 1999-150248P 19990903 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: HUMAN GENOME SCIENCES INC. 9410 KEY WEST AVENUE,

FOCKVILLE, MD, 10850

NUMBER OF CLAIMS: 33 EXEMPLARY CLAIM: 1 LINE COUNT: 134-67

The present invention relates to novel human Ig like polypeptides and isolated nucleic acres containing the coding regions of the genes encoding such polypeptides. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human Ig-like polypeptides. The invention further relates to diagnostic and

therapeutic methods useful for diagnosing and treating disorders related to these novel human Ig-like polypeptides.

L33 ANSWEE 13 OF 41 USPATFULL

ACCESSION NUMBER: 2002:126332 USPATFULL

Human protein tyrosine phosphatase polynucleotides, TITLE:

polypeptides, and antibodies

Shi, Yanggu, Gaithersburg, MD, UNITED STATES INVENTOR(S):

Ruben, Steven M., Olney, MD, UNITED STATES

NUMBER KIND DATE

PATENT INFORMATION: US .0002064844 A1 .00020530 APPLICATION INFO:: US .0001-906779 A1 .00010718 (9)

RELATED APPLN. INFO.: Continuation-in-part of Ger. No. WO 2001-US1563, filed

on 17 Jan 2001, UNKNOWN

NUMBER DATE

FRIORITY INFORMATION: US 2000-176306P 20000118 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE,

ROCKVILLE, MD, 20850

NUMBER OF CLAIMS: EXEMPLARY CLAIM: 1 LINE COUNT: 1.71.39

The present invention relates to novel human PTPase polypeptides and isolated nucleic acids containing the coding regions of the genes encoding such polypeptides. Also provided are vectors, host cells,

antibodies, and recombinant methods for producing human PTPase polypeptides. The invention further relates to diagnostic and

therapeutic methods useful for diagnosing and treating disorders related to these novel human PTPase polypeptides.

1.33 ANSWER 14 OF 41 USPATFULL

APPLICATION INFO .:

ACCESSION NUMBEF: 2002:126317 USFATFULL

Human tumor necrosis factor delta and epsilon TITLE: Yu, Guo-Liang, Berkeley, CA, UNITED STATES

INVENTOF(S): Ni, Jian, Germantown, MD, UNITED STATES

Gentz, Feiner L., Rockville, MD, UNITED STATES Dillon, Patrick J., Carlsbad, CA, UNITED STATES

PATENT AUSIGNEE(S): Human Genome Sciences, Inc., Rockville, MD, UNITED

STATES, 20850 (U.S. corporation)

PATENT INFOFMATION:

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1997-815783, filed

on 1. Mar 1997, PENDING

NUMBER PRICEITY INFORMATION: DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION LEGAL REPRESENTATIVE: HUMAN GENOME SCIENCES INC. 9410 KEY WEST AVENUE,

FOCKVILLE, MD, 20850

NUMBER OF CLAIMS: EXEMPLARY CLAIM: 1

1. Drawing Page(s) NUMBER OF DRAWINGS:

LINE COUNT: 13531

The invention relates to human TNF delta and TNF epsilon polypeptides, polynucleotides encoding the polypeptides, methods for producing the polypeptides, in particular by expressing the polynucleotides, and agonists and antagonists of the polypeptides. The invention further relates to methods for utilizing such polynucleotides, polypeptides, agonists and antagonists for applications, which relate, in part, to research, diagnostic and clinical arts.

L33 ANSWER 15 OF 41 USPATFULL

2002:126314 USPATFULL ACCESSION NUMBER:

Cytokine receptor-like polynucleotides, polypeptides, TITLE:

and antibodies

INVENTOP(S): Fuben, Steven M., Olney, MD, UNITED STATES

Ni, Jian, Germantown, MD, UNITED STATES

Young, Paul E., Gaithersburg, MD, UNITED STATES Shi, Yanggu, Gaithersburg, MD, UNITED STATES

NUMBER KIND DATE -----US 2002064826 A1 20020530 US 2001-874069 A1 20010606 (9) PATENT INFORMATION:

APPLICATION INFO.:

RELATED APPLN. INFO.: Continuation in part of Ser. No. WO 2000-US32525, filed

on 30 Nov 2000, UNKNOWN

NUMBER DATE

PRIORITY INFORMATION: US 1999 168621P 19991203 (60)

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: HUMAN GENOME SCIENCES INC. 9410 KEY WEST AVENUE,

FOCKVILLE, MD, 20850

NUMBER OF CLAIMS: EXEMPLAFY CLAIM: 1 LINE COUNT: 12089

The present invention relates to novel human cytokine receptor-like AB polypeptides and isolated nucleic acids containing the coding regions of the genes encoding such polypeptides. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human cytokine receptor-like polypertides. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating disorders related to these novel human cytiskine receptor like polypeptides.

L33 ANSWER 16 OF 41 USPATFULL

ACCESSION NUMBER: 000:106306 USPATFULL TITLE: 'al human secreted proteins

Ni, Jian, Germantown, MD, UNITED STATES INVENTOF(S):

> Baker, Revin P., Darnestown, MD, UNITED STATES Dirse, Charles E., North Potomac, MD, UNITED STATES Fiscella, Michele, Bethelda, MD, UNITED STATES Etmatsoulis, George A., Jilver Spring, MD, UNITED

Ersen, Craid A., Laytonsville, MD, UNITED STATES Support, Daniel E., Centreville, VA, UNITED STATES Young, lau! E., Gaithersburg, MD, UNITED STATES Finer, Feithard, Gaithersburg, MD, UNITED STATES Juan, D. Roxanne, Bethesda, MD, UNITED STATES Olsen, Henrik S., Gaithersburg, MD, UNITED STATES

LaFleur, David W., Washington, DC, UNITED STATES Moore, Paul A., Germantown, MD, UNITED STATES Shi, Yanggu, Gaithersburg, MD, UNITED STATES Wei, Ping, Brookeville, MD, UNITED STATES Florence, Kimberly A., Rockville, MD, UNITED STATES

NUMBER KIND DATE US 3002064818 A1 20020530 US 2001-789561 A1 20010222 (9)

APPLICATION INFO.: RELATED APPLN. INFO.: Continuation-in-part of Ser. No. WO 2000-US24008, filed

on 31 Aug 2000, UNKNOWN

NUMBER DATE

PRIORITY INFORMATION: US 1999-152317P 19990903 (60) US 1999-152315P 19990903 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE,

ROCKVILLE, MD, 20850

23 NUMBER OF CLAIMS: EKEMPLARY CLAIM: 1 24623

PATENT INFORMATION:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention relates to novel human secreted proteins and isolated nucleic acids containing the coding regions of the genes encoding such proteins. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human secreted proteins. The invention further relates to diagnostic and therapeutic methods useful for dragnosing and treating diseases, disorders, and/or conditions related to these novel human secreted proteins.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L33 ANSWER 17 OF 41 USPATFULL

ACCESSION NUMBER: 2002:119538 USPATFULL

Nucleic acids, proteins, and antibodies TITLE:

INVENTOR(S): Fosen, Craig A., Laytonsville, MD, UNITED STATES

Fuber, Steven M., Olney, MD, UNITED STATES Barash, Steven C., Rockville, MD, UNITED STATES

NUMBER KIND DATE PATENT INFORMATION: US .0002061521 A1 .00000523 APPLICATION INFO:: US .0001-764869 A1 .00010117 (9)

NUMBER DATE

PRIORITY INFORMATION: US $2000 \cdot 179065P$ 20000131 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE,

FOCKVILLE, MD, 20850

NUMBER OF CLAIMS: 1.4
EXEMPLARY CLAIM: 1
LINE COUNT: 779-7

CAS INDEMING IS AVAILABLE FOR THIS PATENT.

The present invention relates to nevel cardiovascular system related polyhudlectides and the polypeptides encoded by these polyhurlectides herein collectively known as "cardiovascular system astigens," and the use of such cardiovascular mystem antigend for detecting disorders of the pardicvascular system, particularly the presence of lancer of cardiovascular system tissues and cancer metastases. More specifically, isolated cardiovascular system associated nucleic acid molecules are

provided encoding novel cardiovascular system associated polypeptides. Novel cardiovascular system polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human cardiovascular system associated polynucleotides and/or polypeptides. The invention further relates to diagnostic and therapeutic methods useful for diagnosing, treating, preventing and/or prognosing disorders related to the cardiovascular system, including cancer of cardiovascular system tissues, and therageutic methods for treating such disorders. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The present invention further relates to methods and/or compositions for inhibiting the production and function of the polypeptides of the present invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L33 ANSWER 18 OF 41 USPATFULL

ACCESSION NUMBER: 2002:105937 USPATFULL

Major intrinsic protein (MIP) like polynucleotides, TITLE:

polypeptides, and antibodies

Ruben, Steven A., Olney, MD, UNITED STATES INVENTOR(S):

Ni, Jian, Germantown, Mi, UNITED STATES

Human Genome Sciences, Inc., Rockville, MD (U.S. PATENT ASSIGNEE(S):

corporation)

NUMBER KIND DATE -----PATENT INFORMATION: US 2002055142 A1 20020509 APPLICATION INFO.: US 2001-862419 A1 20010523 (9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. WO 2000-US31919, filed

on 21 Nov 2000, UNKNOWN

NUMBER L'ATE

PRIORITY INFORMATION: US 1999-167047P 19991124 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE,

ROCKVILLE, MD, 20850

NUMBER OF CLAIMS: EXEMPLARY CLAIM: 1 LINE COUNT: 11747

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention relates to novel human MIP-like polypeptides and isolated nucleic acids containing the coding regions of the genes enceding such polypeptides. Also provided are vectors, host cells, ant:bodies, and recombinant methods for producing human MIP-like polypeptides. The invention turther relates to diagnostic and

therapeutic methods useful for diagnosing and treating disorders related to these novel human MIP-like polypeptides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L33 ANSWER 19 OF 41 USEATEULL

ACCESSION NUMBER: #00:::94088 USPATFULL

Eringle domain-containing polynucleotides, TITLE:

polypeptides, and antibodies

INVENTOF(S): Ni, Jian, Germantown, MD, UNITED STATES

> Moore, Paul A., Sermantown, MD, UNITED STATES Buben, Steven M., Glney, MD, UNITED STATES

NUMBER FIND DATE PATENT INFORMATION: US 200, 051484 A1 20020502

US 11001-848288 A1 .:0010504 (9) APPLICATION INFO .:

Continuation-in-part of Ser. No. WO 2000-US30664, filed RELATED APPLN. INFO.:

in M Nov 2000, UNKNOWN

DATE NUMBER

FRIORITY INFORMATION:

UB 1999-164853P 19991112 (60)

DOCUMENT TIPE: FILE SEGMENT:

Utility APPLICATION

LEGAL REPRESENTATIVE: HUMAN GENOME SCIENCES INC. 9410 KEY WEST AVENUE.

FOCKVILLE, MD, 20850

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

l

LINE COUNT:

1.041

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention relates to novel human KDC polypeptides and isolated nucleic acids containing the coding regions of the genes encoding such polypeptides. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human KDC polypeptides. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating disorders related to these novel human KDC polypeptides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L33 ANSWEP 20 OF 41 USPATFULL

ACCESSION NUMBER: 2002:85190 USPATFULL

TITLE:

Nucleic acids, proteins, and antibodies

INVENTOR(S):

Eosen, Craig A., Laytonsville, MD, UNITED STATES

Fubin, Steven M., Olney, MD, UNITED STATES

Barash, Steven C., Rockville, MD, UNITED STATES

NUMBER KIND DATE US 2002045030 A1 .00020418 US 2001-908711 A1 .00010720 (9) PATENT INFOFMATION:

APPLICATION INFO.:

RELATED APPLN. INFO.:

Continuation in part of Ser. No. Wo 2001-US1360, filed on 17 Jan 2001, UNKNOWN Continuation in-part of Ser. No. US 2001-764867, filed on 17 Jan 2001, UNKNOWN Continuation in part of Ser. No. WO 2001-US1344, filed on 17 Jan 2001, UNKNOWN Continuation in-part of Ser. No. US 2001-764892, filed on 17 Jan 2001, UNRNOWN Continuation-in-part of Ser. No. WO 2001-U31345, filed on 17 Can 2001, UNKNOWN Continuation in-part of Ser. No. US 2001-764888, filed on 17 Jan 2001, UNRNOWN Continuation in part of Ser. No. WO 2001-US1329, filed on 17 Jan 2001, UNRHOWN Continuation in-part of Ser. No. US 2001-764905, filed on 17 Jan 2001, UNRNOWN Continuation in part of Ser. No. US 2001-764891, filed th 17 Jan 2001, UNKNOWN Continuation in-part of Ser. tio. Wo 2001-US1339, filed on 17 Jan 2001, UNRNOWN Fontinuation in part of Ser. No. US .001-764809, filed on 17 Jan 2001, UNKNOWN Continuation in-part of Ser. Ho. WO 2001-US1340, filed on 17 Jan 2001, UNRESOWN Pontinuation-in-part of Ser. No. US 1001-764874, filed on 17 Jan 2001, UNKNOWN Continuation in-part of Ser. No. WE 1001-US1334, filed on 17 Jan 1001, UNEMEWN Continuation in-part of Ser. No. US 2001-7648 & filed on 17 Jan 2001, UNENDWN Continuation in-part of Ser. No. WE . 001-US1310, filed on .7 Jan . 001, UNRENEWN Continuation-in-part of Ser. No. US 2001-7648 ... filed on 17 Jan . 001, UNENIWN Continuation in-part of Ser. No. US 2001-764902, filed on 17 Jan 2001, UNRINGWN Fontinuation in part of Ser. No. WO 2001-US1249, filed

on 17 Can 2001, UNKNOWN Continuation-in-part of Ser.

No. US 2001-764870, filed on 17 Jan 2001, UNKNOWN Continuation-in-part of Ser. No. WO 2001-US1348, filed on 17 Jan 2001, UNKNOWN Continuation-in-part of Ser. No. US 2001-764882, filed on 17 Jan 2001, UNKNOWN Continuation in-part of Ser. No. WO 2001-US1347, filed on 17 Jan 2001, UNKNOWN Continuation-in-part of Ser. No. US 2001-764896, filed on 17 Jan 2001, UNKNOWN Continuation-in-part of Ser. No. WO 2001-US1307, filed on 17 Jan 2001, UNKNOWN Continuation-in-part of Ser. No. US 2001-764864, filed on 17 Jan 2001, UNKNOWN Continuation-in-part of Ser. No. WO 2001-US1341, filed on 17 Jan 2001, UNKNOWN Continuation-in-part of Ser. No. US 3001-764856, filed on 17 Jan 2001, UNKNOWN Continuation-in-part of Ser. No. WO 2001-US1336, filed on 17 Jan 2001, UNKNOWN Continuation in-part of Ser. No. US 2001 704868, filed on 17 Jan 2001, UNKNOWN Continuation in-part of Ser. No. WO 2001-US1312, filed on 17 Jan 2001, UNKNOWN

DATE

PRIORITY INFORMATION:

IJS	2000-179065P	20000131	(50)
US	2000-180628P	20000204	(60)
ПЗ	.3000-351868P	20001308	(60)
US	2000-232398P	20000914	(60)
US	2000-249300P	20001117	(60)
US	2000-251990P	20001208	(60)
US	2000-250160P	20001201	(60)
US	2000-209467P	20000607	(60)
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U.S	2000-1806D8P	20000204	(60)
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US	2000-217487P	20000711	(60)
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US 2000-246610P 20001108 (60)
US 2000-230437P 20000108 (60)
US 2000-251990P 20001205 (60)
US 2000-251988P 20001205 (60)
US 2000-251979P 20001205 (60)
US 2000-251979P 20001205 (60) US .0000-256719P 2000120% (60) US 0.000-0.50150P 0.0001201 (60)US 2000-251989P 20001208 (60) US 2000-250391P 20001201 (60) US .0000-254097P 20001211 (60) US 2000-231968P 20000912 (60) US 2000 226279P 20000818 (60) US 2000-186350P 20000302 (60)
US 2000-184664P 20000224 (60)
US 2000-189874P 20000316 (60) US 2000-198103P 20000418 (60) 20000823 (60) US //000-117009P US 2000-235484P 20000926 (60)
US 2000-190076P 20000317 (60)
US 2000-209467P 20000607 (60)
US 2000-205515P 20000519 (60)
US 2001-259678P 20010105 (60)

DOCUMENT TYPE:

FILE SEGMENT:

Utility APPLICATION

LEGAL PEPRESENTATIVE:

HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE,

ROCKVILLE, MD, 20850

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

LINE COUNT:

1 244.2

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention relates to novel ovarian related polynucleotides and the polypeptides encoded by these polynucleotides herein collectively known as "ovarian antigens," and the use of such ovarian antiques for detecting disorders of the ovaries and/or kreast, particularly the presence of ovarian and/or breast cancer and ovarian and/or breast cander metastases. More specifically, isolated ovarian associated nucleic acid molecules are provided encoding novel ovarian associated polypeptides. Novel ovarian polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human ovarian associated polynucleatides and/or polypeptides. The invention further relates to diagnostic and therapeutic methods useful for diagnosing, treating, preventing and/o: prognosing disorders related to the ovaries and/or breast, including ovarian and/or breast cancer, and therapeutic methods for treating such disorders. The invention further relates to screening methods for identitying agonists and antagonists of polynucleatides and polypeptides of the invention. The present invention further relates to methods and/or compositions for inhibiting the production and function of the polypoptides of the present invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L33 ANSWER 21 OF 41 USPATFULL

ACCESSION NUMBER:

Neuropeptide like polypeptide zpep17 TITLE:

INVENTOR (S : Chercard, Paull O., Granite Falls, WA, UNITED STATES

Bishor, Paul D., Fail City, WA, UNITED STATES

H JMBEF FIND DATE -----US 2002045210 A1 20020418

PATENT INFURMATION:

US 2001-776795 APPLICATION INFO.: A1 20010205 (9)

> NUMBER DATE

PRIORITY INFORMATION:

US 2000-180314P 20000204 (60) US 2000-180896P 20000207 (60)

DOCUMENT TYPE: Utility APPLICATION FILE SEGMENT:

LEGAL REPRESENTATIVE: Jennifer K. Johnson, SymoGenetics, Inc., 1201 Eastlake

Avenue East, Seattle, WA, 98102

NUMBER OF CLAIMS: EKEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 12 Drawing Page(s)

LINE COUNT: 4459

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention relates to polynumleotide and polypeptide molecules for zpep17, a novel secreted protein. The polynucleotides encoding zpep17, may, for example, be used to identify a region of the genome associated with human disease states. The present invention also includes methods for producing the protein, uses therefor and antibodies thereto.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L33 ANSWER 22 OF 41 USFATFULL

PRIORITY INFORMATION:

3003:78739 USPATFULL ACCESSION NUMBER:

Nucleic acids, proteins, and antibodies TITLE:

INVENTOR(S): Fosen, Craig A., Laytonsville, MD, UNITED STATES

Fuben, Steven M., Olney, MD, UNITED STATES

Barash, Steven C., Pocky: Ne, MD, UNITED STATES

NUMBER KIND DATE US 7002042386 Al 20020411 US 2001-764870 Al 20010117 PATENT INFORMATION: APPLICATION INFO.: Al 20010117 (9)

NUMBER DATE -----

US 7000-179065P 70000131 (60)
US 7000-180678P 70000204 (60) US 2000-214896P 200006528 (60) US 2000-217487P _20000**7.**| (60) HS (000)=225758P ិបិល១ញាំ8!4 (៩០) 20000736 (60) MS 1000 1200963P US 7000-117496P ______(•.@) /1/1 (•.@) 113 PODEC-115447P .annoq0314 (40) $US_{-} \mathbb{C}[0]000 = \mathbb{C}[18.190]P$ 20000714 (±0) US 2000-325757P -.90000814 (60) US 2000-226868P ::Dudóù8:::: (6ō)

US 2000-.16-47P 20000707 (60) US 2000-115267P 20000707 (+0) US (1000-21580P)

 $\pm .00000814 (r.0)$ HS (000=,15,70P) .moolgas (.ee) US 1000-1518-9P 10000377 (+.0) HS . 000-,135834P

US [000-134]774P . 00009, ; (£Ū) US [0000-134123P (0.000) US .:000-.::89::4P

US . 000-. :4'18P ______(+0) US (000) (6369P) ____(• t.) បាន (ចើមហ៊ុន) ផ្សាទាំង ___OOO(003;4 (xC)

, baço7.(+ (+a)) US 2000-, 0964P IJ3 3000-, 41809₽ -.0001020 (•.6)..0001117 (+.0) US 2000 F, 492 49P

US 2000 - (6327P 20000329 (60) US 0000-044785P 00001000 (60)
US 0000-044647P 00001101 (60)
US 0000-035368P 00000909 (60)
US 0000-051868P 00001008 (60)
US 0000-051868P 00001008 (60)
US 0000-03444P 0000901 (60)
US 0000-03444P 0000901 (60)
US 0000-03443P 0000901 (60)
US 0000-039345P 0000901 (60)
US 0000-039345P 0000901 (60)
US 0000-039451P 0000901 (60)
US 0000-034513P 0000901 (60)
US 0000-03733413P 0000908 (60)
US 0000-037339P 0000905 (60)
US 0000-037339P 00001000 (60)
US 0000-036800P 00000909 (60)
US 0000-037037P 00001000 (60)

DOCUMENT TYPE: FILE SEGMENT:

Utility
APPLICATION

LEGAL REPRESENTATIVE:

HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE,

ROCKVILLE, MD, 20850

NUMBER OF CLAIMS: EXEMPLARY CLAIM: LINE COUNT:

1 .33133

2.4

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention relates to novel proteins. More specifically, isolated nucleic acid molecules are provided encoding novel polypeptides. Novel polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human polynucleotides and/or polypeptides, and antibodies. The invention further relates to diagnostic and therapeutic methods useful for diagnosing, treating, preventing and/or prognosing disorders related to these novel polypeptides. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The present invention further relates to methods and/or compositions for inhibiting or enhancing the production and

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L33 ANSWER 23 OF 41 USPATFULL

ACCESSION NUMBER: 2000:78745 USPATFULL

TITLE: Stanniomaldin polynucleotides, polypeptides, and

methods based therein

function of the polypertides of the present invention.

INVENTOR(S.: Olsen, Henrik S., Gaithersburg, MD, UNITED STATES

Shang, Ke-Shou, Brudsels, BELGIUM Lindsberg, Perttu, Helsinki, FINLAND Tatlisumak, Turgut, Helsinki, FINLAND

Kaste, Marilka, Vantaa, FINDANI:

Andersson, Leif C., Hels:nki, FINLAND

PATENT ASSIGNEE(S): Human Genome Sciences, Inc., Fockville, MD, UNITED

STATES, 1985) (U.S. corporation)

RELATED APPLN. INFO:: Continuation in-part of Ser. No. We 2000-US29432, filed

NUMBER DATE

PRIORITY INFORMATION:

US 1999-161740P 19991027 (60)

DOCUMENT TYPE:

Utility

FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE: HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE,

FOCKVILLE, MD, 20850

NUMBER OF CLAIMS:

EXEMPLARY CLAIM:

NUMBER OF DRAWINGS:

12 Drawing Page(s)

LINE COUNT:

9559

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AΒ The present invention relates to human stanniocalcin (STC)

> polynucleotides, polypeptides, and other Stanniocalcin compositions and to novel methods based thereon. In a specific embodiment, the Stanniocalcin compositions of the invention are used to treat or protect neural cells. Moreover, the present invention relates to vectors, host cells, antibodies, and recombinant and synthetic methods for producing the Stanniocalcin compositions of the invention. Also provided are diagnostic methods for detecting or prognosing diseases, disorders, damage or injury, associated with alterations of the Stanniocalcin compositions of the invention, and to therapeutic methods for treating such diseases, disorders, damage or injury.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L33 ANSWER 24 OF 41 USFATFULL

ACCESSION NUMBER:

2000:78413 USPATFULL

TITLE:

Nucleic acids, proteins, and antibodies

INVENTOR(S):

Posen, Craig A., Laytonsville, MD, UNITED STATES

Ruben, Steven M., Olney, MD, UNITED STATES

Barash, Steven C., Fockville, MD, UNITED STATES

NUMBER	KIND	DATE	
us 2002042096	Αl	20020411	
US 1001-764887	Αl	20010117	(9)

NUMBER DATE

PATENT INFOFMATION: APPLICATION INFO .:

PRIORITY INFORMATION:

NUME	SER	DATE	
US (2000-179	0.2 5 D	00000131	(60)
A2 Timn-180		20000204	(60)
US 2000-214	.886P	81.6000013	(50)
US 2000-217	487P	.:00009711	(FO)
US 2000-225	758P	20000814	$(r_i 0)$
US 2000-220	1963P	20000726	$(\vec{r}_i(t))$
US 3000-317	496P	20000711	(<u>•</u> ())
US 2000-225	447P	200000314	(<u>6</u> 0)
US = JOOO - DIS	230P	20000714	(r _i())
US 3000-325	757P	20000314	$(\dot{\omega}0)$
US 2000-226	នេសនិ P	SUE0004113	(+i0)
US POHH-NE	647P	20000707	(+i0)
U3 [1000-11]	JUZP .	20000814	$(\vec{x}_i(t))$
U3 ["H(H)-,"])	явиР	20000707	$(\bullet, (1)$
U.3 11000-115	70P	20006814	(i.u)
U.3 [10] (10 = 151	SEUP.	10001208	(÷0)
US 2000-235	#34P	30000937	(+·()
US . QUO 34	174P	100000921	(+(1)
113 North-134	D23P	10000921	(+(1)
US .::000-228	9234P	10000830	(r0)
US 20004	513P	10000814	(60)
US .:000 36	31 3P	.50000929	(.50)
US 2000-224	519P .	20000814	(60)

US 11000-220954P 20000726 (60) 20001029 (60) US 2000-241809P 20001117 (60) US .000-249299P US .000-236327P 200000429 (60) US 1000-141785P (60) 05,010,000 20001101 (60) US 2000-244617P US 2000-225268P .:00000814 (60) US 2000-036368P 20000939 (60) US .:000-251896P -30001208 (60) US 2000-251868P 00001008 (60) US 2000-009344P -2000094H (60) US .1000-234997P 200000925 (60) US 0000-029343P 200000901 (60) US 2000-029345P 20000901 (60) US 2009-239287F 200009901 (60) US 2000-229513F 200000905 (60) US 2000-231413F 200000908 (60) US 2000-329509P 200009995 (60) US 2000-136367F 20000939 (60) US 2000-237039P 20001003 (60) US 2000-237038P 20001002 (60) US 2000-136370F 20000939 (60) US 2000-236802P 30001002 (60) 20001002 (60) US 2000-237037F US 2000-237040P 20001003 (60) US 2000-240960P 20001030 (60) US 2000-239935P 20001013 (60)

DOCUMENT TYPE: FILE SEGMENT:

Utility
APPLICATION

LEGAL REPRESENTATIVE:

HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE,

HOCKVILLE, MD, 20850

NUMBER OF CLAIMS: 24 EXEMPLARY CLAIM: 1 LINE COUNT: 19583

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention relates to novel liver related polynucleotides and AB the polypeptides encoded by these polynucleotides herein collectively known as "liver antigens," and the use of such liver antigens for detecting disorders of the liver, particularly the presence of cancer of liver and cancer metastases. More specifically, isolated liver associated nucleic acid molecules are provided encoding novel liver associated polypeptides. Novel liver polypeptides and antibodies that hind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human liver associated polynucleotides and/or polypeptides. The invention further relates to diagnostic and therapeutic methods useful for diagnosing, treating, preventing and/or prognosing disorders related to the liver, including cancer of liver tissues, and the rapeutic methods for treating such disorders. The invention further relates to screening methods for identifying agonists and untagonists of polynuclectides and polypeptides of the invention. The present invention further relates to methods and/or compositions for inhabiting the production and function of the polypeptides of the present invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L33 ANSWER 25 OF 41 USPATFULL

ACCESSION NUMBER: UM02:668** USPATEULL

TITLE: ABS trimsmort polynucleatides, polypeptides, and

antikodies

INVENTOR(S): Ruben, Steven M., Olney, MD, UNITED STATES
Ni, Jian, Germantown, MD, UNITED STATES

Moore, Paul A., Germantown, MD, UNITED STATES

NUMBER KIND DATE

PATENT INFORMATION: US 2002037549 A1 00020328 APPLICATION INFO:: US 2001-767870 A1 00010124

RELATED APPLN. INFO.: dontinuation-in-part of Mer. No. WO 2000-US19736, filed

on 20 Jul 2020, UNKNOWN

DATE NUMBER

PRIORITY INFORMATION:

US 1999-145.:15P 19990723 (60) US 1994-149445P 19990818 (60) US 1999-164730P 19991112 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPPESENTATIVE: HUMAN GENOME SCIENCES INC. 9410 KEY WEST AVENUE,

FOCKVILLE, MD, 20850

NUMBER OF CLAIMS: CE EMEMPLARY CLAIM: 1 LINE COUNT: 12219

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention relates to novel human ABC transport polypeptides and isolated nucleic acids containing the coding regions of the genes encoding such polypeptides. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human ABC transport polypeptides. The invention further relates to diagnostic and

therapeutic methods useful for diagnosing and treating disorders related

to these novel human ABC transport polypeptides.

CAS INTEXING IS AVAILABLE FOR THIS PATENT.

L33 ANSWER 20 OF 41 USPATFULL

ACCESSION NUMBER: 2002:66870 USPATFULL

Habblike polynucleotides, polypeptides, and antibodies TITLE:

Ruben, Steven M., Olney, MD, UNITED STATES INVENTOR(S):

Shi, Yanggu, Gaithersburg, MD, UNITED STATES

NUMBEE KIND DATE _...

PATENT INFORMATION: US 2002037523 A1 20020328 APPLICATION INFO.: US 2001-875016 A1 20010607 (9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. WO 2000-US33134, filed

on 7 Dec 2000, UNKNOWN

NUMBHE DATE

PRIORITY INFORMATION: UU 1999-109838P 19991:09 (60)
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LAGAL PERFESENTATIVE: HUMAN GENOME SCIENCES INC. 9410 KEY WEST AVENUE,

MOOTKVILLE, MD, 20850

NUMBER OF CLAIMS: EXEMPLARY CLAIM: LINE COUNT: 1 11587

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention relates to novel human IL-6-like polypeptides and isolated nucleic acids containing the coding regions of the genes enoticing such polypeptides. Also provided are vectors, host cells, antiposties, and recombinant methods for producing human IL 6-like polymeptides. The invention further relates to diagnostic and

the:apoutic methods useful for diagnosing and treating disorders related

to thome novel human IL-6 like polypeptides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L33 ANSWER 27 OF 41 USPATFULL

ACCESSION NUMBER: 2002:48270 USPATFULL

TITLE: INVENTOR(S): Methods for analyzing protein binding events Hefti, John J., San Francisco, CA, UNITED STATES

NUMBER	KIND	DATE
2002028461	A.	.:0020307

PATENT INFORMATION: APPLICATION INFO.: RELATED APPLN. INFO.: 113 US 2001-923474 Al ::0010806 (9)

Continuation of Ser. No. US 1999-365580, filed on 2 Aug 1999, GRANTED, Pat. No. US 628/874 Continuation-in-part

of Ser. No. US 1999-243134, filed on 1 Feb 1999,

PENDING

NUMBER DATE

: NOITAMMCTME YTIMOIM

US 1998-73445P 19980202 (60) US 1999-134740P 19990518 (60)

DOCUMENT TYPE: FILE SEGMENT:

Utility APPLICATION

LEGAL REPFESENTATIVE:

Richard L. Neeley, Clifford B. Perry, Signature BioScience, Inc., 21124 Cabot Boulevard, Hayward, CA,

94545 1130

NUMBER OF CLAIMS: EXEMPLARY CLAIM: 45 1

NUMBER OF DEAWINGS: LINE COUNT:

37 Drawing Page(s)

4(14.1

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention provides a variety of methods of analyzing protein binding events using a system capable of directly detecting

protein/ligand complexes based upon the dielectric properties of the complex. The system can be used in a variety of analyses involving protein binding events, such as screening ligand libraries, characterizing protein kinding interactions, and identifying ligands.

The system can also be utilized in diverse analytical and diagnostic applications.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L33 ANSWER 28 OF 41 USPATFULL

ACCESSION NUMBER: 2002:22131 USPATFULL

TITLE:

18 Human secreted proteins

INVENTOR (S::

Shi, Yanggu, Gaithersburg, MD, UNITED STATES Toung, Paul E., Gaithersburg, MD, UNITED STATES Ebner, Reinhard, Gaithersburg, MD, UNITED STATES Mappet, Daniel R., Centreville, VA, UNITED STATES

Puken, Steven M., Olney, MD, UNITED STATES

NUMBER FINE DATE

PATENT INFORMATION:

APPLICATION INFO.:

US 7007017966 A1 20010131 US 7001-768826 A1 20010175 (9)

RELATED APPLN. INFO.:

Continuation-in-part of Ser. No. WO 2000-US22350, filed

on 15 Aug . 000, UNENOWN

NUMBER DATE

PETORITY INFORMATION: UP: 1999 148759P 19990816 (60)

DOCUMENT TYPE: Utility
FINE SEGMENT: APPLICAT

LEGAL FERRESENTATIVE: HUMAN GENOME SCIENCES INC. 2410 KEY WEST AVENUE.

APPLICATION

ECCEVILLE, MD, 20850

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

.23

1 18117

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention relates to novel human secreted proteins and

isolated nucleic acids containing the coding regions of the genes encoding such proteins. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human secreted proteins. The invention turther relates to diagnostic and therapeutic methods useful for diagnosing and treating diseases, disorders, and/or conditions related to those novel human secreted proteins.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L33 ANSWER 29 OF 41 USPATFULL

ACCESSION NUMBER: 2000:12361 USPATEULL

Uteroglobin-like polynucleotides, polypeptides, and TITLE:

ant Podies

Ni, Jian, Germantown, MD, UNITED STATES INVENTOR(S):

Ruben, Steven M., Olney, MD, UNITED STATES

NUMBER KIND DATE

PATENT INFORMATION: US 2002006640 Al 20020117
APPLICATION INFO.: US 2001 846258 Al 20010502 (9)
RELATED APPLN. INFO.: Continuat:on-in-part of Ser. No. WO 2000-US30326, filed

on 3 Nov 2000, UNKNOWN

NUMBER DATE

PRIORITY INFORMATION: US 1999-163395P 19991104 (60)

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

LEGAL REFRESENTATIVE: HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE,

ROCKVILLE, MD, 20850 NUMBER OF CLAIMS: EXEMPLARY CLAIM: 1
LINE COUNT: 12076

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention relates to novel human uteroglobin-like polypeptides and isolated nucleic arids containing the coding regions of the genes encoding such polypeptides. Also provided are vectors, host

cells, antibodies, and recombinant methods for producing human utercylobin-like polypeptides. The invention further relates to

diagnostic and therapeutic methods useful for diagnosing and treating disorders related to those novel human uteroglobin-like polypeptides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L33 ANSWER 30 OF 41 USPATFULL

ACCESSION NUMBER: 2000::8489 USPATEULL

Fetinoid receptor interacting polynucleotides, TITLE:

polypeptides, and antibodies

Shi, Yangqu, Gaithersburg, MD, UNITED STATES INVENTOR (S::

Euken, Stover M., Olney, MD, UNITED STATES

NUMBEF KIND DATE PATENT INFOFMATION: 00 .0000004489 Al .000201.0 APPLICATION INFO:: 00 .0001-788600 Al .00010201 (9)

RELATED APPLN. INFO.: Continuation in-part of Ser. No. WO 2000 US22351, filed

dr. 15 Aug 2000, UNKNOWN

DOCUMENT TYPE: Utality FILE SEGMENT: APPLICATION

LEGAL FEPRESENTATIVE: HUMAN GENOME SCIENCES INC. 9410 KEY WEST AVENUE,

ROCKVILLE, MD, 20850

NUMBER OF CLAIMS: EXEMPLARY CLAIM: . ! LINE COUNT: . . 25.7

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention relates to novel human RIP polypeptides and isolated nucleic acids containing the coding regions of the genes encoding such polypeptides. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human RIP polypeptides. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating disorders related to these novel human FIP polypeptides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L33 ANGWER 31 OF 41 USPATFULL

10007:75196 USPATFULL ACCESSION NUMBER:

TITLE: Bio assay device and test system for detecting

molecular binding events

Hefti, John, San Francisco, CA, United States INVENTOR(S):

PATENT ASSIGNEE(S): Signature BioScience, Inc., Hayward, CA, United States

(U.S. corporation)

NUMBER KIND DATE
 US 6368795
 B1 20020409

 US 1999-143194
 19990201
 PATENT INFORMATION: APPLICATION INFO.: 19990201 (9)

> NUMBER DATE ______

PRIORITY INFORMATION: US 1998-73445P 19980202 (60)

DOCUMENT TYPE: Utility FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Chin, Christopher L. FILE SEGMENT:

LEGAL FEPRESENTATIVE: Neeley, Fichard L., Perry, Clifford B.

NUMBER OF CLAIMS: 13 EXEMPLARY CLAIM: ì

NUMBER OF DEAWINGS: 51 Drawing Figure(s); 28 Drawing Fage(s)

LINE COUNT: 3.253

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Systems and methods for detecting molecular binding events and other environmental effects using the unique dielectric properties of the bound molecular structure or structures are presented. A molecular bunding layer is coupled along the surface of a signal path. A test signal is propagated along the signal path, whereby the test signal couples to the molecular binding layer, and in response, exhibits a signal response.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

133 ANSWER 32 OF 41 USPATFULL

1001:9760 USPATFULL ACCESSION NUMBER:

Method and apparatus for detecting molecular binding TITLE:

events

INVENTOR(s): Hefti, John, San Francisco, CA, United States

FATENT ASSIGNEE(S): Signature BioScience, Inc., Hayward, CA, United States

(U.S. Gorperation)

NUMBER KIND DATE FATENT INFORMATION: 0. 6333468 B1 .0020115 APPLICATION INFO:: 0. 1997-365578 14390802 (9)

FELATED APPLN. INFO.: Continuation in part of Ser. No. US 1999-243194, filed

on 1 Feb 199∋

DATE NUMBEE.

US 1998-73445P 19980202 (50) PF.IOF.ITY INFORMATION:

DOCUMENT TYPE: Utility GRANTED FILE SFGMENT:

PRIMARY EXAMINER: Chin, Christopher L.

LEGAL REPRESENTATIVE: Perry, Clifford B., Neeley, Richard L.

NUMBER OF CLAIMS: 20 EXEMPLARY CLAIM: 1

51 Drawing Figure(s); 28 Drawing Page(s) NUMBER OF DEAWINGS:

LINE COUNT: 3.281

CAS INDEMING IS AVAILABLE FOR THIS PATENT.

Systems and methods are presented for detecting molecular kinding events and other environmental effects using the unique dielectric properties of the bound molecular structure or structures. A molecular binding region is coupled along the surface of a signal path. A test signal is propagated along the signal path, whereby the test signal couples to the molecular kinding region, and in response, exhibits a signal response.

CAS INDEMING IS AVAILABLE FOR THIS PATENT.

L33 ANSWER 33 OF 41 EUROPATFULL COPYRIGHT 2000 WILA

GRANTED PATENT - ERTEILTES PATENT - BREVET DELIVEE

786087 EUROPATFULL EW 300209 FS PS ACCESSION NUMBER:

POLYPEPTIDE-DENDRIMER COMPLEXES. TITLE: POLYPEPTID-DENDRIMER ROMPLEME.

COMPLEMES DE POLYPEPTIDES-DENDRIMEPES.

SINGH, Fratap, 19111 S.W. 69th Street, Miami, FL 33193, INVENTOR (S):

HS

EADE BEHRING INC., 1717 Deerfield Foad, Deerfield, PATENT ASSIGNEE(S):

Illinois 60015, US

PATENT ASSIGNEE NO: 1905941

Helbing, Joerg, Dr. Dipl. Chem. et al., Patentanwaelte AGENT:

von Kreisler-Selting-Werner, Postfach 10 22 41, 50462

Koeln, DE

AGENT NUMBER: 80653

BEPB2002015 MP 0786087 B: 0029 OTHER SOUPCE:

Wila EPS-2002-H09-T2 SOUFCE:

LOCUMENT TYPE: Patent

Anmeldung in Englisch; Veroeffentlichung in Englisch LANGUAGE: F AT; R BE; R CH; R DE; R DE; R ES; R FI; R FE; R GB; R DESIGNATED STATES:

GF; F HE; R IT; F LH; F LM; R MC; F NL; R FT; R SE

EFBI EUROPAEISCHE FATENTSCHEIFT (Internationale FATENT INFO. PUB. TYPE:

Anmeldung:

PATENT INFOFMATION:

KIND DATE PATERT NO EP 770087 B1 160.0227

19970730 'OFFENLEGUNGS' DATE:

1996.0809 APPLICATION INFO:: EP 1996 927393 [9950811 PRIORITY APPLN. INFO.: US 1945 514075 FELATED Down. INFO.: W0 900-U01/057 960809 INTAKZ

970227 INTENE WU M707498

FEFERENCE PAT. INFO.: WC AM 01174 A

WO M. 27902 A

FEF. NON-PATEUR COMM. WO 9707398 W0 94 19693 A

Wo 35 18641 A

FEF. NON-PATENT LIT.: BIGGENUMBATE CHEMISTRY, vol. 1, no. 5, 1 September 1990,

pages 305 308, Xi0601746,4 BOBERTS J C ET AL: "USING STAFBURST DENDRIMERS AS LINKER MOLECULES TO RADIOLEBEL ANTIBODIES" APSTRACTS OF PAPERS AMERICAN CHEMICAL SICIETY, vol. 211, no. 1 2, .4 - 28 March 1996, NEW CELEANS, page BICT 193 XP002 20332 P. SINGH: "Coupling

of multiple proteins to starburst dendrimers."

ANSWER 34 OF 41 PCTFULL COPYRIGHT 2002 Univention

ACCESSION NUMBER: TITLE (ENGLISH):

TITLE (FRENCH):

INVENTOR(S):

PATENT ASSIGNEE(S):

ACENT: SHIBHIMA, Gina, N. LANGUAGE OF PUBL.: English LANGUAGE OF FILING: English DECUMENT TYPE: Patent

PATENT INFORMATION:

MUMBER KIM: DATE

FUJISE, Kenichi; YEH, Edward

Us only; YEH, Edward, for US only

WO 2002036624 A2 20020510

2002036624 PCTFULL ED 20020523 EW .:00219 METHODS AND COMPOSITIONS RELATING TO FORTILIN, AN

ANT: APOPTOTIC MOLECULE, AND MODULATORS OF FORTILIN PROCEDES ET COMPOSITIONS ASSOCIES A LA FORTILINE, UNE

MOLECULE ANTI-APOPTOTIQUE, ET MODULATEURS DE FORTILINE

BOARD OF REGENTS, THE UNIVERSITY OF TEMAS SYSTEM, for

all designates States except US; FUJISE, Kenichi, for

DESIGNATED STATES:

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR OU ON DE DE DE DE ES ES ES ES GE GE GE GE HE HU ID IL IN IS JP KE KG KP KP KZ LC LK LP LS LT LU LV MA MD MG MK MN MW MX M2 NO N2 PH PL PT RO EU SE SE SE SI SK SE TJ TM TH TT TZ WA WG WS WZ VN YW ZA ZW GH GM KE ES MW MZ SU SE SZ TZ UG RW AM AZ BY RG RZ MD RU TJ TM AT BE CHICY DE DK ES FI FF GB GR IE IT LU MC NL PT SE TE BF BJ CF CG CI CM GA GN GQ GW ML MF NE SN TD TG

APPLICATION INFO.: WO 3001-US43985 A 20011030 PRICEITY INFO.: US 2000 60/244,416 20001030

ABEN The polypeptide Fortilin (also known as Translationally Controlled Tumour Protein, TCTP) specifically interacts with p53, a tumor suppressor involved in the induction of apoptosis and the normal growth regulation of a cell. Fortilin also specifically binds MCL1 (Myeloid Cell Leukemia 1). Fortilin has the ability to prevent apoptosis, which may be unregulated in hyperproliferative cells. The present invention is directed at compositions and methods involving a Fortilin modulator, which can induce apoptosis, for the prevention, treatment, or diagnosis of hyperproliferative diseases and conditions, including cancer and atheresclerosis. It is directed also at compositions and methods involving Fortilin, which can inhibit apoptosis, for the treatment of diseases and condition characterized by apoptosis, including certain vascular conditions.

ABFF Le polypeptide fortiline (egalement appele proteine tumorale de regulation de traduction, TCTP) interagit specifiquement avec p53, un suppresseur de tumeur intervenant dans l'induction de l'apoptose et la regulation de la croissance normale d'une cellule. La fortiline se lie aussi specifiquement a McLl (leupemie myelcide 1). La fortiline est capable de prevenir l'apoptose, qui peut être deregled dans des cellules hyperproliferatives. L'invention concerne des compositions et des procedes comprenant un modulateur de fortiline, capable d'induire l'apoptose, pour prevenir, traiter ou diagnostiquer des malagies ou des affections hyperproluteratives, γ compared le cancer et l'atherosolerose ; ainsi que des compositions et des procedes comprenant la fortiline, capable d'inhiber l'apoptose, pour traiter des maladies et affections caracterisees par l'apoptose, y compris certaines affections

L33 ANSWER 35 OF 41 USPATFULL

vasculaires.

ACCESSION NUMBER: 2001:15.751 USPATFULL

Methods for analyzing protein binding events Hefti, John, San Francisco, CA, United States

INVENTOR(S):

PATENT ASSIGNEE(S): Signature BicScience, Inc., Hayward, CA, United States

(U.S. corporation)

NUMBER KIND DATE

_ ____X..._

PATENT INFORMATION: US 6287874 B1 APPLICATION INFO:: US 1999-365580 20010911 19390802 (9)

FELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1999-243194, filed

on I Feb 1999

NUMBER DATE ---- -----

US 1998-73445P 19980202 (60) US 1999-134740P 19990518 (60) PFIORITY INFORMATION:

DOCUMENT TYPE:

DOCUMENT TYPE: Utility
File SEGMENT: GFANTED
PFIMAFY EXAMINER: Horlick, Kenneth R.
ASSISTANT EXAMINER: Strzelecka, Teresa
LEGAL REPRESENTATIVE: Ausenhus, Scott L., Perry, Clifford B., Neeley, Richard

L.

NUMBER OF CLAIMS: 45
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 44 Drawing Figure(s); 33 Drawing Page(s)
LINE COUNT: 4099

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention provides a variety of methods of analyzing protein binding events using a system capable of directly detecting protein/ligand complexes based upon the dielectric properties of the complex. The system can be used in a variety of analyses involving protein binding events, such as screening ligand libraries, characterizing protein binding interactions, and identifying ligands.

The system can also be utilized in diverse analytical and diagnostic

applications.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L33 AMEWER 36 OF 41 USPATFULL

ACCESSION NUMBER: 2000:87731 USPATFULL

TITLE: Methods and compositions for using membrane-penetrating

proteins to carry materials across cell membranes

INVENTOR(S): Draper, Rockford, Plano, TM, United States

PATENT ASSIGNEE(S): Board of Regents, The University of Texas Systems,

Austin, TX, United States (U.S. corporation)

NUMBER KIND DATE -----PATENT INFORMATION: 20000711

US 6086900 US 1998-47148 APPLICATION INFO.: 19930324 (9)

> NUMBER DATE

PRIORITY INFORMATION: US 1997-42056P 19970326 (60)

DOCUMENT TYPE:

FILE SEGMENT:

PHIMARY EXAMINER:

LEGAL FEFFESENTATIVE:

NUMBER OF CLAIMS:

62

EXEMPLARY | LAIM: 1

NUMBER OF DEAWINGS: 8 Drawing Figure(s); 6 Drawing Page(s)

LIME COUNT: 1:729

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention provides methods and compositions delivery of agents into the cytoplasm of cells. Particularly, it concerns the use of membrane penetrating texin proteins to deliver drugs to the cytoplasm of target colls.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

LOB ANSWER 37 OF 41 USPATFULL

ACCESSION NUMBER: 2000:84049 USPATFULL

Polypertide: dendrimer complexes TITLE:

Single, Pratap, Wilmington, DE, United States INVENTOR(S):

Lin, Spencer, Granger, IN, United States

Moll, III, Fred, Pembroke Pines, FL, United States Dade Behring Inc., Deerfield, IL, United States (U.S. PATENT ASSIGNEE(S):

corporation)

NUMBER KIND DATE -----

US 6083708 20000704 US 1995-514075 19950811 (8) PATENT INFORMATION: APPLICATION INFO.:

Utility DOCUMENT TYPE: FILE SEGMENT: Granted

PRIMARY EXAMINER: Wortman, Donna C.

LEGAL REPRESENTATIVE: Lundquist, Ronald C, Tymeson, Cynthia G

NUMBER OF CLAIMS: 28 EXEMPLARY CLAIM:

NUMBER OF DEAWINGS: 5 Drawing Figure(s); 1 Drawing Page(s)

LINE COUNT: 1674

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Compositions are disclosed, comprising dendrimers to which a first polypeptide is controllably coupled. Such polypeptide-dendrimer compositions are effective for controllably coupling a second polypeptide to the dendrimer. The first and second polypeptides have separate and distinct defined biological activities, for example, two antibodies with first and second binding specificities or an antibody and an engymatic label. Such compositions are useful as indicators in specific binding assays, e.g., immunoassays. Methods for sequentially coupling two different polypeptides to a dendrimer to form compositions of the invention also are disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L33 ANSWER 38 OF 41 MEDLINE

ACCESSION NUMBER: 90060164 MEDEINE DOCUMENT NUMBER: 90060164 PubMed ID: 2584019

The reactivity of sulfhydryl groups of TITLE:

bovine dardiac **troponin** C. Fuchs F; Liou Y M; Grabarek 2 AUTHOF:

CORFORATE SOURCE: Department of Physiology, University of Pittsburgh School

of Medicine, Pennsylvania 15261.

CONTRACT NUMBER: AE-10551 (NIAM3)

E-37 HI 05949 (NHLBI)

MOUSHAL OF BIOLOGICAL CHEMISTRY, (1989 Dec 5) 264 (34) SOURCE:

20344-9.

Journal code: 2995171R. ISSN: 0001-9258.

United States PUB. COUNTRY:

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

Priority Journals FILE SEGMENT:

ENTEY MONTH: 199001

ENTRY DATE: Entered STN: 19900378

Last Updated on STN: 19970.03 Entered Medline: 19900108

hovine cardiac troponin C (cTnC) contains 2 cysteine residues, AB Tys 35 located in the nonfunctional Ca2+-binding loop I and Cys-84 in the If terminal segment of the central helix. We have studied the reactivity of clys residues in cTnc with 5,5'-dithibbis (Conitrobenzoic acid) (DTNB) and / d:ethylamino-3-(4'-male:midylrhenyl)-4 methyl@oumarin (CPM). The latter commound fluorences only when reacted with the protein. The reaction with 97NB followed second frees kinetics with respect to DTNB, the rate econutants being 3.27 s 1 M-1 and 1.82 s 1 M-1 in the presence and absence of Ca2+, respectively. These rates are much slower than the rate of reaction with Cys-98 of skeletal TnC (sTnC) or with the grea-denatured cTnC, indicating that both Cys residues are partly buried within the

structure of the protein. The increase in reactivity was induced by binding of Ca2+ to the single low affinity Ca2+ binding site (site II). The fluorescence increase upon reaction of cTnC with CPM in the absence of ψ a. ψ could be fitted with a single exponential equation indicating that both cysteine residues are equally available to the reagent. The reaction in the presence of Ca2+ was biphasic. Analysis of CNBr fragments of cTnC labeled with CPM under various conditions indicated that in the presence of Cal+ the reactivity of Cys-84 is increased while that of Cys-35 is slightly decreased. This finding is consistent with the model of Herzberg et al. (Herzberg, O., Moult, J., and James, M. N. G. (1986) J. Biol. Chem. 201, 2638-2644) and the data of Ingraham and Hodges (Ingraham, R. H., and Hodges, E. S. (1988) Biochemistry 27, 5891-5898), suggesting that the Call-induced conformational change in the N-terminal half of ThC involves separation of the helix C from the central helix, thereby increasing the accessibility of Cys-84. The slow overall kinetics, however, indicates that the structure in the vicinity of Cys residues is relatively compact regardless of Call+. We interpret the increase in reactivity towards CPM as consistent with a Cad+-induced exposure of a hydrophobic pocket in the vicinity of Cys-84.

L33 AMSWEE 39 OF 41 USPATFULL

ACCESSION NUMBER: 86:34211 USPATFULL

TITLE: Protein kinase enzyme AUT-PK 500 and a radioimmunoassay

for detection of neoplasia

INVENTOR(S):

INVENTOR(S): Sharma, Rameshwar K., Memphis, TN, United States
PATENT ASSIGNEE(S): The University of Tennessee Eesearch Corp., Knoxville,

'TN, United States (U.S. corporation)

NUMBER KIND DATE PATENT INFORMATION: US 4594319 19860610 APPLICATION INFO:: US 1984-590712 19840319 (6) DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Wiseman, Thomas G.
ASSISTANT EXAMINER: Moskowitz, M.

LEGAL PEPRESENTATIVE: Neuner, George W., Linek, Ernest V.

NUMBER OF CLAIMS: 37 EXEMPLARY CLAIM: 1,6 1,6

NUMBER OF DEAWINGS: 10 Drawing Figure(s); 7 Drawing Page(s)
LINE COUNT: 1019

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

This invention is directed to AUT-PK 500, a novel autophosphorylating protein kinase, to the purification and characterization of AUT-PK 500 from rit adrenocortical carcinoma, to the use of AUT-PK 500 is a marker for necolasia cells, and to a radioimmunoassay for detecting AUT PK 500 in neoplasia cells.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L33 ANSWER 40 OF 41 MEDLINE

ACCESSION NUMBER: 83135739 MEDLINE

DOCUMENT NUMBER: 83135733 PubMed ID: 6826548
TITLE: Hydrodynamic properties of bevine cardiac troponin

I and troponin T.

F and troponin T.
Byers D M; Kay C M AUTHOE:

JOURNAL OF BIOLOGICAL CHEMISTRY, (1983 Mar 10) 258 (5) SOURCE:

2351-4.

Jour:141 code: 2985121R. ISSN: 0021-9258.

PUB. COUNTRY: United States

Journal; Article; (JOUFNAL AFTICLE)

English
Priority Cournals
198304
Entered STN: 19900318 LANGUAGE:

FILE SEGMENT:

ENTRY MONTH:

ENTRY DATE:

Last Updated on STN: 19990129 Entered Medline: 19830407

Bovine cardiac troponin-I (TN-I) and troponin-T (TN-T) AΒ have been examined in solution using ultracentrifugation, gel filtration, and viscosity. A new method of purifying TN-T, employing hydroxylapatite chromatography in 6 M urea, is reported. Cardiac TN-T (Mr = 36,000) undergoes a reversible, concentration-dependent association in nondenaturing buffers, probably to a tetramer. The Stokes radius (Rs) of aggregated TN-T, determined by sedimentation velocity and gel chromatography on Sephacryl S-300, is 80 A and the reduced viscosity of the subunit ranges from 20 to 25 ml/g at protein concentrations between 0.5 and 2.5 mg/ml. These data suggest that TN-T forms highly asymmetric aggregates in solution. Bovine cardiac TN-I also has a tendency toward self-association, but is essentially monomeric (Mr = 23,000) at protein concentrations below 1 mg/ml. The presence of reducing agent is necessary to avoid intermolecular disulfide bond formation. From gel filtration experiments, the value of Rs is 29 A indicating that TN-I is a moderately asymmetric protein (frictional ratio = 1.5). Similar properties are observed when both sulfhydryl groups of TN-I are modified by carboxamidomethylation.

L33 ANSWER 41 OF 41 MEDLINE

ACCESSION NUMBER: 71011997 MEDLINE

DOCUMENT NUMBER: 71011997 PubMed ID: 4248628

TITLE: A study of the role of sulfhydryl groups

in the interaction of **troponin** and myofibrils.

AUTHOR: Parker C J Jr; Kilbert L H Jr

SOUPCE: ARCHIVES OF BIOCHEMISTRY AND BIOPHYSICS, (1970 Oct) 140 (2)

326-33.

Journal code: 0372430. ISSN: 0003-9861.

PUB. COUNTRY: United States

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 197012

ENTRY DATE: Entered STN: 19900101

Last Updated on STN: 19900101 Entered Medline: 19701209

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                           Diosynth RTP, Inc., USA
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The invention is directed to methods for puritying troponin

I, particularly recombinant troponin I
produced in a bacterial empression system. Recombinant troponin
I can be advantageously purified after reversibly protecting the
free sulfhydryl groups, e.g. by forming sulfates. In a specific example,
troponin I reacted with rotion tetrathionate yielded
sulfitslyped troponin I, and the approximate of the protection of the sulfhyproperior interest.
The chromatog. On an anion exemander, follower by by troposition interest.
The chromatog. Facile depretent on a time sulfhyproperior groups yields a highly purified product ready for refolding.

L67 ANSWER 2 OF 6 USPATFULL

ACCESSION NUMBER:

2002:126023 USPATFULL

TITLE:

Purification of human troponin

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INVENTABLE :

Comm., Regarry, Cary, N., TVITET STATES Regarded, Brian, Seathle, WA, WITED STATES Beng, Klamiand, Northborough, MA, UNITED STATES

Shang, Chemming, Blacksburg, VA, UNITED STATES

PATENT ASSIGNEE(S): Dipsynth RTP, Inc. (U.S. corporation)

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'AS INDEMING IS AVAILABLE FOR THIS PATENT.

TET ANDWER 3 OF 6 USPATEULI

AC TESSION NUMBER:

Purification of names troponin :::::F:

Conn, Gregory, Cary, NC, UNITED STATES INVENTOR (S):

Feardon, Brian, Seattle, WA, UNITED STATES

Reng, Mianfang, Northbirough, MA, UNITED STATES Thank, Chemming, Blacksburg, VA, UNITED STATES

liesynth RTP, Inc. (U.J. corporation) PATERT ASSIGNEE(S):

NUMBER KINI DAIR

______ PATENT INFORMATION: US 1000055145 A1 10020509 US 1001-998619 A1 10011130

APPLICATION INFO.:

Continuation of Ser. No. US 2001-903398, filed on 10 RELATED APPLN. INFO.:

Jul 1001, PENDING

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APPLICATION FILE SEGMENT:

DARBY & DARBY P.C., 805 Third Avenue, New York, NY, LEGAL FEPRESENTATIVE:

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ΞÖ NUMBER OF CLAIMS: EXEMPLABY CLASM:

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CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The invention is accepted to methods for purifying Troponin

I, particularly resumbinant Tropnin I produced in a bacterial expression system. Fedombinant Tropnin I can be advantageously purified after reversibly protecting the free sulfnydryl groups, e.g., by forming sulfates. In a specific example, Troppin I reacted with sodium tetrafhionate vielder sulfatolyzed Tropnin I, which was purified by diricationarhy or in amich exchanger, to owed by hydrophobic interaction chromotopicaphy. Faith explored in a time soling Hydrate dey,elps a highly purified product ready for restaints.

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167 ANSWER 4 OF 6 WPIES (2) 2002 IHOMSON DEEWENT

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protecting the free sulfhydryl groups.

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COMM, O; PEARDON, P; ZENG, X; ZHANG, C INVENTOR(S):

(LIDS-N) DIOSYNTH FTP INC PATENT ASSIGNEE(S):

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PRIORITY AFPLN. INFO: US 2000-217069P 20000/10; UC 2001-903398 20010710; US 2001-998619 20011130

2102-154921 [20] WPIDS ANWO 200204512 A UPAB: 20020402 AB

NOVELTY - Preparing troponin I, comprising protecting free sulthydryl groups of troponin I under reducing conditions, and troponin I is then purified by subjecting troponin I comprising sulfaydryl protecting groups to annomatography, is new.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for troponin I comprising salfhydryl protecting groups.

ACTIVITY - Cytostatic.

MECHANISM OF ACTION - Inhibitor of angiogenesis. No supporting data

USE - The method is useru, for purifying troponin I , particularly resemble and troponin I. The black y partitled troponin I, presentation and a referred state as useful for antibody generation, as a fintril or standard immunicassay roagent, or to inhibit angiogenesis important in treating various cancers.

ADVANTAGE - Protection of sulfhydryl groups during troponin I preparation eliminates the costly need for maintaining non-reducing conditions throughout protein preparation, purification and storage, and need for reducing agents. The sulfhydryl-protected trapania deer not form intrachain or interchain disalfide prosslines. We rall you and to profit the multi-ster purification was greater than 5% at purity lawels of greater than 95 . Deprotection of the sulthydryl groups yields a highly purified product ready for refolding. Dwg. 0 11

THE ANSWER FOR 6 IFIPAT COPYRIGHT 2002 IFI : ind. For thinat; (Finth; (Finth) AAPURIFICATION OF HOME TROPONIN Town; Aregory, Jary, N., J. 11112 1111 11 11 11 Reardon; Brian, Seattle, WA, U.S. Zeng: Xianfang, Northborough, MA, US Zhang; Chenming, Blacksburg, VA, US FAIRNT ASSIGNEE (3): Diosynth RTP, Inc. MARRY & DARRY P.C., 205 Third Avenue, New York, NY, A FROTE , --.;

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                                                                       DESCRIPTION OF FIGURES:
FIGS. 1A and 1B. A. Proposed reaction for oxidative sulfitolysis. B. Clearage
of disultide bond by sodium sultite to form the Osilta ierly dive.
FIG. 2. Proparation and Warning of this thing which the best to the
FIG. 1. Summary of :Troponin-1 preparation.
Fig. 4. Q-Sepharose FF enromatography of Troponin I. Buffer
A: 6 M urea, 25 mM Tris-HCl, pH 7.5, 100 mM; Buffer B: 6 M urea, 25 mM
Tris-EC1, pH 7.5, 2 M NaCl; Gradient: Step, 0% B for the flow-through and 100
B for the strip; and Flow rate: 150 ml/ min.
FIG. 5. 30° ml Q-sepharose FF chrcmatcgraphy. Buffer A: 6 M urea, 25 mM Tris-hCl, ih .5, 1:0 nM; Buffer E: 6 M irea, 20 mM TrisH°, pH ".5, 2 M NaCl; Gradient: Ziep, 4 W for e.it 20 ml = 1 + 120 Strip; and #1 W rates 20 ml/min.
FIG. 6. SDS-FAGE analysis troponing of After anion exchange stops no. 1 and no.
Fir 16 tris-glycine gol, under non-educing conditions. A-H refer to lakes In
the SDS-PAGE del. A. Sulfitolymed troponin Lot 3L4 standard; B. sylubilized
inclusion podies; C. sulfitolyzed inclusion bodies (AEX No. 1 load); D. anion
exchange no. 1 flowthrough; E. anion exchange no. 1 salt eulate; F. anion
exchange nt. [ load; G. anion exchange no. 2 flowthrough; and, H. anion
eximange ni. . 100 mM NaCl Oliate.
FIG. ". Toyopearl 6 (6 M (ph-nyl) EIC incomatograph. Buffer A: k M urea, 25 mE
Tri:-EC1, FH ".5, 1 M [NH4" Sod; Buffer B: o M lrea, 25 mH Tris-H'1, pH ".5;
Gradient: Step, 100 B for the flow-inrough and C B for strip; and Flow rate:
10 mlymin.
 FIGS. 8. SDS-FAGE analysis troponin lot after hydrophobic interaction
chromatography in 16% tris-glycine gel, under nonreducing conditions. A-F
refers to lames in the SDS-PAGE gel. A. Sulfitalyzed tropanin Lot 3L4
standard; F. AEX step no. 2, troponin eulate pool; C. HIC load (w/1M ammonium
 sulfate); [. HIC : Dwthrough (trop-n.n product); E. HIC low sait oulate (column
 strip'; F. lot 35% sulfitelyland important product.
 FIG. 9. Quantitation of rink on horse is in
 FIG. 10. Troponin I LysC mapping.
 FIG. 11. SM S-PAGE unalysis of sulfitolyzed troponin reduction with
dithiothreitol for 45 mins. at ambient temperature. One mg/ ml Tnl in 6 M urea,
  35 mM tris, 0.15 M MaCl pH 7.5, run on 167 tris-glycine gel. 1. 10., Mark 12 MW
 of is; 2. 9., sulf.t dyized ThI; 3. 0.05 mM DFT; 4. 0.10 mM DTT; 5. 0.2 mM DTT;
 F. O. MM DIT; F. O.S MMDTT; R. 1.2 mM DIT.
                The invention is directed to methods for puritying Troponin
                 I, particularly recommonant in part i produce it a matterial
                 expression system. Recommend Transcrib to the contract are provided
                 after neversionly protecting the free sulflydryl groups, e.g., by forming
                 sulfates. In a specific example, Propnin I reacted with sodium
                 tetrafhionate yielded sulfitalyzed Tropnin I, which was purified by
                 chromatography on an anion exchanger, followed by hydrophobic interaction
                 chromatography. Facile deprotection of the sulfhydryl groups yields a
                 highly purified product ready for refolding.
                 2 II Figure si.
               1138. IA and IB. A. From sed read to for wideling state lysis. The
                   Togeraph of a sulfide band by sodium sulfite to form the Usulto
                  derivative.
              FIG. 2. Preparation and washing of ThI-containing inclusion bodies.
               WIR. 3. Summary of rTroponin-I preparation.
               VII. 4. .-Robhardse FF chromatography of Troponin I.
                 First As A Morrea, 15 mM Tris-Hol, pH 7.5, 100 mM; Butter Hi & Mother, two fixed-Hol, pH 7.5, 100 mM; Butter Hi & Mother, two fixed-Hol, pH 7.5, Mother Hi & Mother, two fixed-Holds and the fixed-Holds and t
               Mid. 1 - Program of Front market program Association (Association Association Association) (Association Association) (Association) (Associatio
                 NaC.; Grament: Step, 4 B for elution and for B for strip; and blow
                 1 1 1 2 mi/min.
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FIG. 6. SDS-PAGE analysis troponin lot after anion exchange steps no. 1 and no. 2 in 16 tris-glycine gel, under nonreducing conditions. A-H refer to lanes in the SDS-PAGE gel. A. Sulfitolyzed troponin Lot 51.4 standară; B. solubilized inclusion bodies; C. sulfitolyhed inclusi n besieve A-M No. 1 Inai; D. anich exchange to. 1 flowth with F. ani t. exphange do. 1 salt emiste; F. angen exchange me. . mead; H. an. ch exchange no. 7 flowthrough; and, H. anion exchange has a loo mM Nall FIG. 7. Toyopearl 650 M (phenyl) HIC chromatograph. Buffer A: 6 M urea, 👈 mM Tris-HCl, pH 7.5, 1 M (NH4)2SO4; Buffer B: 6 M urea, 25 mM Tris-HCl, pH 7.5; Gradient: Step, 100 B for the flow-through and 0 B for strip; and Flow rate: 10 ml/min. FIGS. 1. BDS-PAGE analysis troponin lot after hydrophobic interaction corromatography in To trus-gly are sel, material and trustill as A-F refer, to lanes in the like-Holfe dev. A. Lu.I.E., your try him is full standard; B. AEX step no. 2, troponin eulate pool; C. HIC load (w/lM) ammonium sulfate); D. BIC flowthrough (troponin product); E. HIC low salt eulate (column strip); F. lot 3LE sulfitoylzed troponin product. FIG. 9. Quantitation of : Thi on Zorbax C3. FIG. 1). Troponin I LysC mapping. FIG. 11. SD S-PAGE analysis of sulfitolyzed troponin reduction with dithipthreitol for 4% mins. at ambient temperature. One mg/ ml TnI in 6 M urea, 25 mM tris, 0.15 M NaCl pH 7.1, run on 16 tris-glycine del. 1. 10., Mark 12 MW Stds; J. 9., sultitolyzed TnI; 3. 0.05 mM DTT; 4. 6.10 mM DTT; 5. 0.2 mM DTT; 6. ...3 mM DTT; 7. 0.5 mMDTT; 3. 1.0 mM DTT. L67 ANSWER 6 OF 6 IFIPAT COPYRIGHT 2002 IFI 10111538 IFIPAT; IFIUDB; IFICDS PURIFICATION OF HUMAN TROPONIN TITLE: Form; Gregory, Cary, NC, 13 INVENTOR (S): Feardon: Fr.an, Seattie, WA, 20 Levy; Mianiang, Northborough, MA, 13 Chang; Chenming, Blacksburg, VA, US Liosynth RTP, Inc. PATENT ASSIGNEE(S): PARBY & LARBY P.C., 805 Third Avenue, New York, NY, AGENT: 10000, US MUMBER PK DATE ______ GRANTED PATENT NO. DATE OR STATUS APPLN. NUMBER _____ _____ _____ ns 2001-903398 PENDING CONTINUATION OF: DATE 11.174147411 _ _ _ _ _ _ _ _ _ "3 [] 1 2-7170-9203.0"10 Frovisional, :'S 20020509 FAMILY INFORMATION: POCUMENT TYPE: Utility Patent Application - First Publication FILE SEGMENT: HEMICAL AFELICATION II horas . DUMBER OF CLAIMS: PRINCES NO ENTREES Fig. 1A and 1B. A. Fropised reaction for emidative sulfitelysis. B. Thaway thrisulfide bond by sodium sulfite to form the Saulfo derivative. FIG. 2. Fregaration and washing of InI-containing inclusion bodies. FIG. 3. Surmary of rTroponin-I preparation. FIG. 4. Q-Sepharose FF Thromatography of **Troponin I.** Buffer A: (M. Grea, 25 mM Tris-Hol, pH 1.5, 100 mM; Biffer P: 6M Grea, 15 mM Tris-Hol, pH 1.5, 2M Mill, Gradient: Step, 10 H for the flowing on and 10 H for the

String and Flow rate: 16 milymin.

Fig. 5, 30 m. g-sephar so FF mr mat. maphy. Butter Ar (Moures, 10 mM Tris-HDI, pH 7.5, 1 " HM; Buffer H: eM :rea, 25 HM TrisHDI, pH 7.1, .M NaCl; Gradient: Step, 4 B for elution and 50 B for strip; and Flow rate: 70 mi/m.m. FIG. 6. SDS-FAGE analysis troponin lct after anim exchange steps no. 1 and no. 2 in 16 tris-glycine gel, under nonreducing conditions. A-H refer to lanes in the SQS-PACE gel. A. Sulfitelyzed troponin Lot ML4 standard; B. solubilized inclusion kodies; C. sulfitelyzed inclusion bodies (AEX No. 1 load); E. amon exchange no. 1 flowthrough; E. amich exchange no. 1 salt enlate; E. arith extrange no. and the extrange no. . the ethic with; and, H. and n exchange nc. 2 100 mM NaCl elimin. Fid. 7. Toyopear. 650M (pheny.) HIC thromatograph. Buffer A: 6M urea, 25 mM Tris-HCl, pH 7.5, IM (NH4)2304; Buffer B: 6M area, 15 mM Tris-HCl, pH 7.5; Gradient: Step, 10) B for the flowthrough and 0 B for strip; and Flow rate: 10 ml/min. FIG. 8. SDS-PAGE analysis trapenin let after hydrophibic interaction diremateurophy in 16 tris-glycine gol, under nonreducing conditions. A-F refers to lanew in the SDS-BAJE gel. A. Siffit Types troponin Lit (L4 standard; F. AEM step no. ., tropunit ellipses; F. HIC list (W/IM answeller sultate; D. HIC flowthrough (trop n.n product); E. HIC low sait eulate (co. mt. strip); F. lot 355 suffitely, heattraponin product. FIG. 9. Quantitation of rTnI on Zorbax C3. FIG. 1). Troponin I LysC mapping. FIG. 11. SDS-PAGE analysis of Fulfitolyzed troponin reduction with dithiothre.tol for 45 mins. at ambient temperature. One mg/ ml TnI in 6M urea, 25 mM tris, 3.15M NaCl pH 7.5, run or 16 tris-1.young gel. 1.10., Mark 12 MW Stds; 2.3., sulfit:/yzed TnI; 3. 6.5 nM CTI; 4. ... rM PTI; 5. 6.1 nM CTI; 6. 0.3 mM DTT; 1. 0.5 mMDTT; 3. 1.0 mH DTT. The invention is directed to methods for puritying Troponin I, particularly resombinant Tropnin I produced in a bacterial expression system. Recombinant Troppin I can be advantageously purified after reversibly protecting the free sulfmydryl groups, e.g., by forming sulfates. In a specific example, Troppin I reacted with sodium tetrafnionate yielded sulfitolyzed Tropnic I, which was purified by chromatography on an anion exchanger, followed by hydrophobic interaction chromatography. Facile deprotection of the suithpary, progs youlds a nightly purified product ready for sefolding. CLMN 20 11 Figure:s). FIGS. 1A and 1B. A. Proposed reaction for axidative sulfitolysis. B. Cleavage of disulfide kend by sedium sulfite to form the Ssulfo derivative. FIG. 2. Preparation and washing of Tnl-containing inclusion bodies. FIG. 3. Summary of rTroponin-1 preparation. FIG. 1. y-Pephanose PF broad or apply of Troponin I. Paffer A: eM Great, and Triandil, process, and EM Patter him of and mM Tris-Hill, pd 1.5, 1M NaCl; Grathern: Jung, 2 str th 1. With the 19) B for the strip; and Flow rate: 150m. min. FIG. 5. 300 ml Q-sepharose FF chromatography. Buffer A: 6M urea, 25 mM Tris-HCl, pH 7.5, 100 rM; Buffer B: 6M urea, 25 mM TrisHCl, pH 7.5, 2M Na 11; Gradient: Step, 4 B for elution and 50 B for strip; and Flow rand: v midr.n. FIG. U. SDS-PARE analys s frogenic 1st after anies exchange steps n . 1 and no. 1 in 16 to see your all to be but the airtist of fitting. A-H refer to lines in the (CS-PAGE 10). A. Suchit dynes in public 1 to 0.4 standard; 9. solubilized inclusion bodies; 7. sufficielyzed inclusion bodies (AEM No. 1 load); D. anion exchange no. 1 flowthrough; E. anion exchange no. i salt eulate; F. anion exchange no. 2 load; G. anion exchange no. 2 flowthrough; and, H. anion exchange no. 2 100 mM NaCl eidate. Fig. 7. Try point 6% M (phonyl) BIT chromatograph. Piffer A: 6M grea, 7^{\pm} eM line-Bit, pB 7.5, in that of the Fifth R: 6M grea, 7^{\pm} eM line-Bit, pB 7.5, in that of the Fifth R: 6M grea, 7^{\pm} eM 7^{\pm} eV 7^{\pm} Film rates of running Fig. 8. CDC-1A3E analysis projecting by any or by an Englation with the first chromatography in 160 tris-glycine gel, under nonreducing conditions. A-8 reters to lames in the SDS-FAGE gel. A. Bulfitolyded troponin Lot 314 standard; P. AEM step ro. 2, troponin eulate pool; C. HIC load 'w/IM numerium sulfato ; D. HIO flawthrough (troponin product ; E. HIO I w sw.

eulate (column strip); F. lot 3L5 sulfiteylzed troponin product.
FIG. 9. Quantitation of rTnl vn Zorbax 03.
FIG. 1. Troponin I lys0 mapping.
FIG. 11. STS-FAGE analysis of surfittinger troponin red. ti h d.th.
dithiothreitol for 45 mins. at ambient temperature. One mg/ ml Tnl in cK
urea, 25 mM tris, 0.15M NaCl pH 7.5, run on 16 tris-glycine gel. 1.16.,
Mark 12 MW Stds; 2.9., sulfitolyzed TnI; 3. 0.05 mM DTT; 4. 0.10 mM DTT;
5. 0.2 mM DTT; 6. 0.3 mM DTT; 7. 0.5 mMDTT; 8. 1.0 mM DTT.